



Request for Proposals (RFP)

RFP# 24-1-1

SCADA Improvements at the North Wastewater Treatment Plant

Submit by: **Monday, February 5, 2024 10:00 AM CST**

Mandatory Meeting: **Tuesday, January 23, 2024 9:00 AM CST**

Submit by drop-off or by mail to:

Village of **A**ddison

Purchasing Department

1 Friendship Plaza

Addison, IL 60101

(630) 543-4100

**VILLAGE OF ADDISON
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***Specifies items that must be properly completed, include all signatures and submitted with the RFP to be considered responsive unless waived by the Village.**

January 12, 2024

RFP No. 24-1-1

To Whom It May Concern:

Herein are RFP Documents to supply the Village of Addison with a Proposal for the following services:

SCADA Improvements at the North Wastewater Treatment Plant

Sealed Proposals must be received at the Information Desk of Addison Village Hall, 1 Friendship Plaza, Addison, Illinois, prior to 10:00 a.m. on Monday, February 5th, 2024; immediately thereafter all Proposals will be publicly opened and read aloud in Room 2002.

All Proposals must be submitted on the forms provided in a sealed envelope and include all signatures and information identified in the RFP specifications. It is the responsibility of the vendor to ensure their response satisfies the requirements identified in the RFP Documents. The self-addressed label provided with the RFP Documents must be affixed to the outside of the sealed envelope.

If there are any errors or inconsistencies found in the RFP Documents, participants must notify the Village of Addison of those errors or inconsistencies before the due date listed above.

The Village of Addison reserves the right to waive all technicalities, and to accept and or reject part(s) of any or all RFPs which it deems advantageous. Minorities and women-owned businesses (W.B.E.) are encouraged to participate.

This is an Illinois Prevailing Wage Project.

A pre-RFP meeting will be held at 9:00 AM, local time, on Tuesday, January 23, 2024, at the North WWTP, 711 N. Addison Road, Addison, IL 60101. All RFP submitters are **REQUIRED** to attend and participate in the meeting.

Respectfully submitted,

A handwritten signature in black ink that reads "Ewa Adamow". The signature is written in a cursive, flowing style.

Ewa Adamow
Village Purchasing Agent

IMPORTANT

The attached label must be affixed to the front of the envelope the completed RFP is submitted in. This attached label may be printed on an 8.5 X 11 label stock or printed on paper and securely fastened to the front of envelope you are submitting the RFP in.

RFPs without the attached label on the envelope may be delayed and not arrive in time for the RFP opening.

If you have questions pertaining to this RFP you may contact:

**Ewa Adamow 630-693-7507
purchasing@addison-IL.org**

RFP Participant Name: _____

Address: _____

City: _____

State: _____ Zip: _____

Village of Addison
1 Friendship Plaza
Addison, IL 60101

Sealed RFP Enclosed

RFP No. 24-1-1 SCADA Improvements at the North
Wastewater Treatment Plant

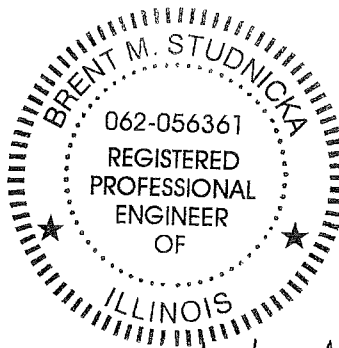
RFP Opening Date Monday, February 5th, 2024

RFP Opening Time 10:00 AM



www.AddisonAdvantage.org

TECHNICAL SPECIFICATIONS
VILLAGE OF ADDISON
ADDISON, ILLINOIS
NORTH WWTP SCADA IMPROVEMENTS
CONTRACT 24-1-1



Brent M. Studnicka
1/12/2024
Exp. 11/30/2025

Prepared by:

STRAND ASSOCIATES, INC.®
IDFPR No. 184-001273
1170 South Houbolt Road
Joliet, IL 60431
www.strand.com

Issued for Bid
January 12, 2024



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SPECIFICATIONS

SECTION 01 11 00

SUMMARY OF WORK

PART 1—GENERAL

1.01 DIVISION ONE

- A. The requirements of Division 01 apply to all sections of the Contract.

1.02 PROJECT SCOPE

- A. CONTRACTOR shall provide all items, articles, materials, operations or methods mentioned or scheduled on the Drawings or herein specified: including all labor, supervision, equipment, incidentals, taxes, and permits necessary to complete the Work as described within the Contract Documents. CONTRACTOR shall install all items provided by OWNER as mentioned or scheduled on the Drawings or herein specified.
- B. Work descriptions noted herein apply to existing materials and equipment when the existing materials or equipment are modified or otherwise changed as a result of this project.

1.03 CONTRACT DOCUMENTS—INTENT AND USE

- A. Intent of Documents:
 - 1. Singular notations and specifications shall be considered plural where application is reasonably inferred.
 - 2. Mention or indication of extent of work under any division or Specification section is done only for convenience of CONTRACTOR and shall not be construed as describing all work required under that division or section.
 - 3. Some individual sections may contain a list of related sections. The list of related sections in individual sections is provided for the convenience of CONTRACTOR and is not necessarily all-inclusive. CONTRACTOR may not rely upon this listing for determination of scope of work. Other sections of the Specifications not referenced in individual sections shall apply as required for proper performance of the Work.
 - 4. Command type sentences may be used in the Contract Documents. These sentences refer to and are directed to CONTRACTOR.
 - 5. Symbols for various elements and systems are shown on the Drawings. Should there be any doubt regarding the meaning or intent of the symbols used, a written interpretation shall be obtained from ENGINEER.
- B. Use of Documents:
 - 1. CONTRACTOR shall examine all Specifications and Drawings for the Work, including those that may pertain to Work CONTRACTOR does not normally perform with its own forces.
 - 2. CONTRACTOR shall use all of the Project Drawings and Specifications:
 - a. For a complete understanding of the Project.
 - b. To determine the type of construction and systems required.
 - c. For coordination with other contractors.
 - d. To determine what other work may be involved in various parts or phases.
 - e. To anticipate and notify others when work by others will be required.

- f. And all other relevant matters related to the project.
- 3. CONTRACTOR is also bound by all requirements of the Contract Documents which are applicable to, pertain to, or affect its Work as may be shown or inferred by the entire set of Project Drawings and Specifications.

1.04 CONSTRUCTION REQUIREMENTS

A. General Information and Requirements:

1. Wastewater treatment during construction must be continuous and the treatment efficiency must be equal to that achieved prior to the start of construction.
2. It shall be the responsibility of CONTRACTOR to not in any way impair the normal treatment or operating efficiency of the facilities, regardless of the work underway. No bypassing of raw or partially treated wastewater to receiving stream shall occur at any time as a result of construction. In general, this requires that new facilities be complete and ready for service or that temporary facilities be provided prior to removing existing units from service for modification or repair. CONTRACTOR shall provide all temporary piping, bypass pumping, and temporary construction required to complete the Work.
3. Operation of existing treatment facilities will be the responsibility of OWNER. CONTRACTOR shall cooperate with OWNER's staff at all times. A minimum of 48 hours prior to making any process or electrical connections to existing facilities or modification or demolition of existing facilities, CONTRACTOR shall notify OWNER in writing. At the time of notification, CONTRACTOR shall submit a schedule for completion of the Work, including a description of measures that will be taken to minimize the impact to existing facilities.
4. Access: CONTRACTOR shall maintain roadways open at all times to meet OWNER's requirements.

B. Construction Sequence:

1. The following construction sequence is provided as a general guideline for the information and for the benefit of CONTRACTOR. This construction sequence is not intended to dictate means, method of construction, or direct construction activities. This construction sequence is a conceptual general construction sequence with minimum recommended outage, shutdowns, and operating units to be maintained in service. The general construction sequence is projected to allow the Work to be completed while maintaining treatment of the wastewater treatment plant. It is not intended to be all inclusive and does not list all work elements or details that are required to complete the Work, complete treatment processes, or place unit processes in service. CONTRACTOR shall be responsible for implementing any additional details required, including temporary piping, bypass pumping, or temporary construction at no additional cost to OWNER.
2. CONTRACTOR may propose alternate sequence or modifications to this sequence. OWNER will review the proposed modification and determine if such modification of the sequence interferes with the proper operation of the treatment activities. Any modifications to this general construction sequence shall be proposed in writing and shall be approved by OWNER prior to their implementations.
3. The existing SCADA 3000 system must remain in service until all existing inputs have been moved to the new equipment. No SCADA 3000 equipment shall be removed or taken out of service until SCC-MCB has been installed and the new SCADA computer HMI graphics have been installed. The SCADA 3000 equipment in RTU-5, RTU-7, and STB PC I/O rack shall be removed first in any order, followed by the RSPS PC I/O rack, then lastly the MTU panel. Work associated with one panel/equipment must be

completed prior to the work associated with other panels/equipment starting. As inputs are transferred from the SCADA 3000 system to the new equipment, the complete functionality of each input must be checked (including alarm array functionality and coordination with ENGINEER for HMI testing) prior to moving to the next input.

- a. Raw Sewage Pump Station (RSPS): Any new conduit and wire shown on the Drawings or included in the Section 26 09 90–SCADA System I/O Listing shall be installed to the extent possible prior to transferring the SCADA 3000 inputs to PLC-EF. The existing SCADA 3000 inputs shall be transferred one at a time from the SCADA 3000 to the existing PLC-EF. Once all the inputs have been transferred to PLC-EF, the SCADA 3000 hardware and associated equipment can be removed.
- b. Secondary Treatment Building (STB): Any new conduit and wire shown on the Drawings or included in the Section 26 09 90–SCADA System I/O Listing shall be installed to the extent possible prior to transferring the SCADA 3000 inputs to the RIO module. The existing SCADA 3000 hardware shall be temporarily relocated to the side of the enclosure and the new backpanel installed in its place. The inputs shall be transferred one at a time from the SCADA 3000 system to the RIO module. Once all the inputs have been transferred to the RIO module, the SCADA 3000 hardware and associated equipment can be removed.
- c. Chlorine Building (CL2): Any new conduit and wire shown on the Drawings or included in the Section 26 09 90–SCADA System I/O Listing shall be installed to the extent possible prior to transferring the SCADA 3000 inputs to the new RIO module. The SCADA 3000 system in the CL2 may be taken out of service for one contiguous eight-hour period to allow for installation of the new backpanel and termination of the wiring. The new RIO module and Ethernet communications with the SCC-MCB PLC must be in service and checked out before System Supplier's personnel leave for the day.
- d. Digester Blower Room (DBR): It shall be confirmed that OWNER has installed the OWNER-furnished wire and conduit from RTU-7 to SCC-MCB prior to any work being performed in RTU-7. Once all the inputs have been transferred to the SCC-MCB PLC, the SCADA 3000 hardware and associated equipment can be removed by OWNER.
- e. Main Control Building (MCB): SCC-MCB and any new conduit and wire shown on the Drawings or included in the Section 26 09 90–SCADA System I/O Listing shall be installed prior to any demolition in the MTU panel. The existing SCADA 3000 inputs shall be transferred one at a time from the existing SCADA 3000 to the new SCC-MCB PLC. Once all the inputs have been transferred to the SCC-MCB PLC, the SCADA 3000 hardware and associated equipment can be removed from the MTU panel.

1.05 CONTRACTOR USE OF SITE

A. General:

1. The "area of the site" referred to in these Specifications shall be as shown on the Drawings. If the "area of the site" is not shown, OWNER's property lines, the Project right-of-way and/or any easements obtained for the Project shall be considered the "area of the site."
2. Construction activities shall be confined within the "area of the site" limits.
3. From the start of work to completion CONTRACTOR is responsible for the care of the site and the premises which are affected by operations of Work of this Contract.

4. Except for permanent site improvements provided under the Contract, CONTRACTOR shall restore property disturbed during the Work, to the conditions which previously existed.
5. Work in occupied spaces shall be restricted to specified Work and essential activities, such as making necessary connections and extending services or constructing temporary access ways. Such work shall be scheduled in advance with OWNER.

B. Parking and Deliveries:

1. CONTRACTOR is responsible for control of traffic by vehicles and persons within the limits of its operations.
2. Parking for employees, subcontractors, and agents of CONTRACTOR shall be in areas subject to approval of OWNER.
3. Access to the site for delivery of construction material or equipment shall be subject to approval of OWNER.

1.06 EXISTING SERVICES, OVERHEAD UTILITIES, AND UNDERGROUND FACILITIES INCLUDING STRUCTURES

- A. Interruption of existing services and systems including heating, ventilating, air conditioning, water, sanitary, lighting and power, signal and security will not be permitted unless specifically indicated otherwise. Provide temporary facilities to maintain services.
- B. If deemed necessary by OWNER, such work shall be accomplished after OWNER's normal office hours.
- C. Work shall not commence until all labor, materials, and equipment are available so Work can continue without interruption or delay.
- D. Should uncharted or incorrectly charted services or Underground Facilities be encountered during installation, notify OWNER and consult with utility owner immediately.
- E. Cooperate with OWNER and utility companies in keeping respective services and Underground Facilities in operation and repair any damage.
- F. CONTRACTOR shall not interrupt existing services and Underground Facilities occupied and used by OWNER or others, except when permitted in writing by OWNER.
- G. Any accidental interruption of services and Underground Facilities shall be repaired immediately, including provision of temporary facilities until permanent repairs can be made.
- H. Prior to any excavation, demolition, or drilling on site, CONTRACTOR shall contact owners of the Underground Facilities in and near the construction area of the intent to excavate, demolish, or drill. As part of this notification requirement, CONTRACTOR shall contact "JULIE" (811 or 1-800-892-0123). CONTRACTOR shall be aware that not all owners participate in "JULIE." A call to this agency shall not absolve CONTRACTOR of the requirements for contacting owners of all Underground Facilities in and near the construction area. CONTRACTOR shall give reasonable advance notice to "JULIE" and other owners for the notification which shall not be less than the minimum advance notification required.

1.07 PROTECTION OF WORK AND IMPROVEMENTS

- A. CONTRACTOR shall protect the property of OWNER, existing improvements, and the Work installed by CONTRACTOR and others from abuse, damage, dust, debris, and other objectionable materials resulting from construction activities.
- B. CONTRACTOR shall provide suitable covers, partitions, or other dust and fume containment devices to suit construction operations.
- C. CONTRACTOR shall keep property, existing improvements, and the Work including structures, mains, fittings, and accessories free from dirt and foreign matter at all times.
- D. CONTRACTOR shall provide temporary plugging of openings, holes, and pipe ends that are existing or that CONTRACTOR has installed.
- E. Property, improvements, and Work damaged by CONTRACTOR shall be repaired or replaced by CONTRACTOR to the satisfaction of OWNER.
- F. CONTRACTOR is cautioned that existing public and private streets, alleyways, and roads may not hold up to typical construction traffic or activities. CONTRACTOR shall repair or replace streets, alleyways, roads, and shoulders damaged by its construction activities to their original condition at CONTRACTOR's expense.

1.08 AVAILABILITY OF LANDS

- A. Easements were not obtained for this Project. CONTRACTOR shall confine its operations, equipment and storage areas to the lands and rights-of-way in which the Project is to be located. CONTRACTOR may enter into written agreements with property owners for use of other lands during construction. Copies of such agreements shall be provided to OWNER.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 29 00

CONTRACT CONSIDERATIONS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: Measurement and Payment—Lump Sum.

1.02 MEASUREMENT AND PAYMENT—LUMP SUM

- A. Payment for Lump Sum projects will be based on the accepted schedule of values for the project.
- B. An acceptable schedule of values will include the following features:
 - 1. Schedule shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction. Schedule shall be subdivided as necessary by specification section and work area.
 - 2. Identify each line item with the number and title of the respective Specification Section.
 - 3. For each major line item list sub-values of major products or operations under the item.
 - 4. For the various portions of the work:
 - a. Each item shall include a directly proportional amount of CONTRACTOR's overhead and profit.
 - b. For items on which progress payments will be requested for stored materials, break down the value into:
 - (1) The cost of the materials, delivered and unloaded, with taxes paid. Paid invoices are required for materials upon request by ENGINEER.
 - (2) The total installed value.
 - 5. The sum of all values listed in the schedule shall equal the total Contract Sum.
 - 6. Schedule shall include a separate listing of general items such as bonds, insurance, mobilization, demobilization, field supervision, and record documents.
- C. Once a schedule of values is accepted, it shall not be revised, except for changes associated with subsequently executed change orders.
- D. No separate measurement for payment will be performed for Lump Sum Work.
- E. CONTRACTOR shall estimate percentage of Work completed. ENGINEER will review CONTRACTOR's estimate of quantity of Work completed.
- F. Payment will be made based on the percentage of the Contract completed less retainage and/or liquidated damages.
- G. Unless noted otherwise, all Work described in the Specifications and/or shown on the Drawings shall be included in the Lump Sum Bid.
- H. Some technical specification sections may include payment provisions. These provisions are in addition to the provisions of this section which apply to all of the Work.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 31 00

COORDINATION, FIELD ENGINEERING, AND MEETINGS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Coordination.
 - 2. Field engineering.
 - 3. Progress meetings.

1.02 COORDINATION

- A. CONTRACTOR shall coordinate scheduling, submittals, and work of the various sections of the work to provide an efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later. See Section 01 11 00—Summary of Work for specific construction sequence.
- B. CONTRACTOR shall verify utility requirements and characteristics of operating equipment are compatible with building utilities and coordinate Work of various sections having interdependent responsibilities for installing, connecting to, and placing in service such equipment.
- C. CONTRACTOR shall coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on the Drawings and shall follow routing shown for pipes, ducts, and conduit as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas, except as otherwise indicated, CONTRACTOR shall conceal pipes, ducts, and wiring within the construction and coordinate locations of fixtures and outlets with finish elements.
- E. CONTRACTOR shall coordinate completion and cleanup of Work of separate sections in preparation for substantial completion and for portions of Work designated for OWNER's occupancy.
- F. After OWNER occupancy of premises, CONTRACTOR shall coordinate access to Site for correction of defective Work and Work not in accordance with the Contract Documents to minimize disruption of OWNER's activities.

1.03 FIELD ENGINEERING

- A. CONTRACTOR shall locate and protect property stakes, legal survey monuments, benchmarks, and survey control and reference points. CONTRACTOR shall pay for replacement of disturbed property stakes and legal survey monuments by a Registered Land Surveyor acceptable to OWNER and for replacement of benchmarks and survey control and reference points provided by ENGINEER.

1.04 PROGRESS MEETINGS

- A. Progress meetings will be held throughout progress of the Work at intervals agreed to by OWNER, ENGINEER, and CONTRACTOR. Interval will generally be monthly.
- B. CONTRACTOR's project manager, job superintendent, major subcontractors, and suppliers shall attend as appropriate to address agenda topics for each meeting. CONTRACTOR's representatives shall have authority to bind CONTRACTOR to decisions at the meetings.
- C. The project schedule shall be updated monthly and shall be reviewed at each progress meeting.
- D. CONTRACTOR shall also provide the following information in written form at each meeting.
 - 1. Construction progress, including:
 - a. Activities completed this reporting period.
 - b. Activities in progress this reporting period.
 - c. Activities scheduled to commence this reporting period.
 - 2. Description of problem areas.
 - 3. Current and anticipated delays.
 - a. Cause of the delay.
 - b. Corrective action and schedule adjustments to correct the delay.
 - c. Impact of the delay on other activities, on milestones, and on completion dates.
 - 4. Changes in construction sequence.
- E. ENGINEER will prepare and distribute minutes to all attending parties.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 33 00

SUBMITTALS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Whenever possible throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number or by reference to recognized industry standards.
 - 2. To facilitate CONTRACTOR's understanding of the design intent, procedures have been established for advance submittal of design data and for its review or rejection by ENGINEER.
 - 3. The type of submittal requirements specified in this section include construction progress schedule, submittal schedule, shop drawings, product data, samples, maintenance manuals, and other miscellaneous work-related submittals.
- B. Related work described elsewhere: More detailed requirements for submittals are described in other sections of these specifications for some materials and equipment. They are to be considered additional requirements to supplement the requirements specified in this section.
- C. Definitions: "Electronic Submittal" is defined as any submittal transmitted electronically to ENGINEER for review.

1.02 IDENTIFICATION OF SUBMITTALS

- A. CONTRACTOR shall completely identify each submittal and resubmittal by showing at least the following information:
 - 1. Name and address of submitter, plus name and telephone number of the individual who may be contacted for further information.
 - 2. Name and location of project and identification number.
 - 3. Drawing number and specifications section number to which the submittal applies.
 - 4. Include the date of each submittal or resubmittal.

1.03 GROUPING OF SUBMITTALS

- A. Unless otherwise specifically permitted by ENGINEER, CONTRACTOR shall make all submittals in groups containing all associated items so that information is available for checking each item when it is received.
- B. Partial submittals may be rejected as not complying with the provisions of the Contract Documents.

1.04 TIMING OF SUBMITTALS

- A. CONTRACTOR shall make all submittals far enough in advance of scheduled dates of installation to provide required time for reviews, for securing necessary approval, for possible revision and resubmittal, and for placing orders and securing delivery.

- B. The review period for submittals that are received after 3 P.M. shall commence on the following business day.

1.05 CONSTRUCTION PROGRESS AND SUBMITTAL SCHEDULES

- A. Submit preliminary schedules within 10 days of the Effective Date of the Contract.
- B. Revise schedules incorporating any comments provided at the schedule review conference and resubmit.
- C. As a minimum, the construction progress schedule shall consist of a horizontal bar chart with a separate line for each major portion of Work or operation, identifying first workday of each week.
- D. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration for each activity. Identify activities that are on the critical path.
- E. Include line items for milestones (if any), Substantial, and Final Completion.
- F. Submit updated schedules with each Application for Payment, identifying changes since previous version.
- G. Indicate estimated percentage of completion for each item of Work at each submission.
- H. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates.

1.06 SHOP DRAWINGS

- A. Shop drawings shall include specially prepared technical data for this project including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements, and similar information not in standard printed form for general application to a range of similar projects. Shop drawings shall be submitted for all manufactured or fabricated items. See individual technical sections for special requirements.
- B. CONTRACTOR shall make all shop drawings accurately to scale and sufficiently large to show all pertinent aspects of the item and its method of connection to the work.
- C. Shop drawings shall be checked, approved, and stamped by CONTRACTOR in accordance with the general provisions of the Contract Documents before transmittal to ENGINEER for review and approval.
- D. Complete shop drawings and descriptive data shall be submitted on all manufactured or fabricated items prior to 50% completion of the Work. Applications for payment beyond 50% of the Contract amount will not be recommended for payment until all shop drawings are submitted, including color hard copies if requested by OWNER, or a revised schedule for any remaining submittals is agreed to by OWNER and ENGINEER.
- E. CONTRACTOR shall submit shop drawings following the PDF submittal procedure described below.

- F. Shop drawings submitted to ENGINEER will be reviewed and stamped "Approved," "Approved as Noted," "Approved as Noted-Resubmit," or "Not Approved." CONTRACTOR shall resubmit shop drawings stamped "Approved as Noted-Resubmit" and "Not Approved," and will continue this process until shop drawings are stamped "Approved" or "Approved as Noted." If drawings are stamped "Approved as Noted-Resubmit," fabrication may proceed in accordance with the marked-up shop drawings. Installation shall not proceed until shop drawings have been resubmitted and stamped "Approved" or "Approved as Noted."
- G. If shop drawings are stamped "Approved as Noted" or "Approved as Noted-Resubmit" and CONTRACTOR does not agree with revisions or cannot conform with revisions, fabrication shall not proceed and shop drawings shall be resubmitted with explanation of CONTRACTOR's position.
- H. All shop drawings used for construction site activities shall bear the "Approved" or "Approved as Noted" stamp of ENGINEER.
- I. PDF Submittal Procedures:
1. Summary:
 - a. Shop drawing and product data submittals shall be transmitted to ENGINEER in electronic (PDF) format.
 - b. The intent of PDF submittals is to expedite the construction process by reducing paperwork, improving information flow, and decreasing turnaround time.
 - c. The PDF submittal process is not intended for color samples, color charts, or physical material samples.
 2. Procedures:
 - a. CONTRACTOR shall review and apply a stamp certifying that the submittal complies with the requirements of the Contract Documents including verification of manufacturer/product, dimensions and coordination of information with other parts of the work.
 - b. CONTRACTOR shall transmit each cover letter and submittal to ENGINEER as an e-mail attachment.
 - c. ENGINEER will return the reviewed shop drawing via e-mail with a transmittal letter, after review, indicating the status of the shop drawing review.
 - d. Distribution of reviewed submittals to subcontractors and suppliers is the responsibility of CONTRACTOR.
 - e. Electronically submitted shop drawings shall follow the following format:
 - (1) All files shall be delivered in PDF format with a minimum resolution of 300 dpi unless otherwise requested by ENGINEER. Scanned in material shall be scanned in color and any markings by CONTRACTOR shall be made in red. Pages shall be rotated to the appropriate position for easy reading on a computer monitor such that the majority of text is vertical.
 - (2) Files shall be delivered without security features activated.
 - (3) Shop Drawings shall be uploaded as individual files. All pages of one submittal should be contained in one file.
 - (4) The file shall open to a cover page containing, at a minimum, the following information:
 - (a) CONTRACTOR's stamp.
 - (b) Name, e-mail, and telephone number of the individual who may be contacted for further information.
 - (c) Project number.

- (d) Submittal number.
 - (e) Submission date, if resubmittal, all previous submission dates.
 - (f) Index detailing contents and the total number of pages in the submittal.
- f. Once a shop drawing has been "Approved" or "Approved as Noted," CONTRACTOR shall provide three hard color copies of the "Approved" or "Approved as Noted" shop drawings to ENGINEER. CONTRACTOR is responsible for the hard copy color replication of ENGINEER's "Approved" or "Approved as Noted" shop drawings for use by CONTRACTOR. Hard copy shop drawings shall be submitted in 3-ring binders or 3-tab report covers.
- J. CONTRACTOR is fully responsible for obtaining any and all copyright permission associated with conversion of shop drawing information to electronic format.
- K. Shop drawings shall include verification that the item meets applicable codes and standards.

1.07 PRODUCT DATA

- A. CONTRACTOR shall provide product data as required to supplement shop drawings.
- B. Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by CONTRACTOR to illustrate a material, product, or system for some portion of the work.
- C. CONTRACTOR shall collect required product data into one submittal for each unit of work or system.
- D. CONTRACTOR shall include manufacturer's standard printed recommendations for application and use, compliance with standards, performance characteristics, wiring and piping diagrams and controls, component parts, finishes, dimensions, required clearances, and other special coordination requirements.
- E. CONTRACTOR shall mark each copy of standard printed data to identify pertinent products, models, options, and other data.
- F. CONTRACTOR shall supplement manufacturer's standard data to provide information unique to the work.

1.08 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by ENGINEER.
- B. Shop Drawings and Product Data:
 - 1. Revise initial drawings or data and resubmit as specified for initial submittal.
 - 2. Itemize in a cover letter any changes which have been made other than those requested by ENGINEER.
- C. CONTRACTOR shall furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than three submittals. ENGINEER will record ENGINEER's time for review subsequent submittals of shop drawings, samples, or other items required for approval and CONTRACTOR shall reimburse OWNER and ENGINEER's charges for such time.

- D. In the event that CONTRACTOR requests a substitution for previously approved item, CONTRACTOR shall reimburse OWNER for ENGINEER's charges for its review time unless the need for such change is beyond control of CONTRACTOR.

1.09 MANUFACTURER'S DIRECTIONS

- A. Manufactured articles, materials, and equipment shall be stored, commissioned, operated, applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer, unless specified to the contrary.
- B. Wherever specifications call for work to be performed or materials to be installed in accordance with the manufacturer's printed instructions or directions, CONTRACTOR shall furnish copies as required for shop drawings of those instructions or directions to ENGINEER before installing the material or performing the work.

1.10 MAINTENANCE MANUAL

- A. Prior to 75% completion of the Contract or at a minimum of 45 days prior to the scheduled start-up date of any individual item of equipment, whichever is earlier, CONTRACTOR shall furnish to ENGINEER two complete color hard copies of a maintenance manual for all equipment furnished. Applications for payment beyond 75% of the contract amount will not be recommended for payment until all maintenance manuals are submitted or a revised schedule for remaining maintenance manuals is agreed to by OWNER and ENGINEER.
- B. The manuals shall include manufacturer's instructions for maintenance and operation for each item of mechanical and electrical equipment. Manuals shall be specific for the equipment as installed; provide project specific inserts as required. Manuals shall contain: operation instructions, lubrication schedules, types and quantities, preventative maintenance program, spare parts list, parts lists, I.D. No. and exploded views, assembly instructions, parts supplier location, trouble shooting and startup procedures and, where applicable, test data and curves.
- C. All sheets shall have reduced dimensions as described for shop drawings, and shall be furnished in 3-ring binders or 3-tab report covers.
- D. CONTRACTOR is responsible for producing an electronic version of the Equipment Operations and Maintenance (O&M) Manuals Manual. The Electronic Equipment O&M Manual shall be delivered in Portable Document Format (PDF). The entire manual may be converted to PDF via scanning or other method of conversion. Drawings or other graphics must be converted to PDF format and made part of the PDF document. CONTRACTOR shall provide all Equipment O&M Manuals in the electronic format as defined below.
- E. The filename for the Equipment O&M Manual submittal will be provided with the request for final Equipment O&M Manuals. Filenames use the "eight dot three" convention (XX XX XX_YY.PDF) where XX XX XX is the specification section number and YY is an ID number. No one file shall be larger than 10 MB. If technical problems require that the submittal be divided into more than one file, a letter extension shall be added to the end of each filename.

- F. The number of files shall be kept to a minimum. Equipment O&M Manuals that span more than one file shall have the final Bookmark "Return to Table of Contents" which shall take the User to the first file on the Equipment O&M Manual.
- G. All text (word processed), spreadsheets, and electronic graphics shall be delivered in portable document format (*.PDF). The resolution of all scanned images shall be a minimum of 300 dpi unless otherwise requested by ENGINEER. Scanned images shall be processed with the "original image with hidden text" option (Adobe Acrobat 6 or higher). This results in a clear image and provides for optical character recognition (OCR) and word search functionality. Graphical files shall be fully searchable. All submittals must be indexed with the Adobe Catalog feature. Placement and structure of index files shall be in accordance with Adobe's recommendations to minimize problems when transferring files. Successful searches for words or strings in the PDF document shall demonstrate proof of OCR.
- H. Rotate pages viewed in landscape to the appropriate position for easy reading on a computer monitor.
- I. Bookmarks shall be created in the navigation frame for each entry in the Table of Contents. Three levels deep is usually enough (i.e., "Chapter," "Section," "Subsection"); however, complex submittals like instrumentation and electrical may be required at the discretion of ENGINEER. When setting bookmarks for Chapter level heading, the page shall be displayed at Full Page. Section and Subsection level heading pages shall be displayed as a magnified view. Bookmarks shall be displayed as subordinate to other bookmarks in their hierarchy set so that only the Chapter level headings are displayed.
- J. Thumbnails shall be generated and embedded in each PDF file.
- K. Files shall be delivered without Security features activated. Password protected files will be unacceptable.
- L. The opening view for PDF files shall be set as follows:
 - 1. Initial View: Bookmarks and Page
 - 2. Magnification: Fit In Window
 - 3. Page Layout: Single Page
- M. The file shall open to the cover page of the Equipment O&M Manual with bookmarks to the left. The first bookmark shall be the name of Equipment O&M Manual.
- N. O&M Manual PDFs shall be delivered electronically and on one flash drive.
- O. CONTRACTOR shall reprocess any portion of the document that does not view or print to OWNER's satisfaction.
- P. CONTRACTOR is fully responsible for obtaining any and all copyright permissions associated with conversion of this information to electronic format.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 41 00
REGULATORY REQUIREMENTS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. OSHA requirements.
 - 2. 35 Ill. Adm. Code 652.
 - 3. 35 Ill. Adm. Code 1100.
 - 4. Roadway limits.
 - 5. Permits.
 - 6. Wage rates.
 - 7. American Iron and Steel requirements.

1.02 OSHA REQUIREMENTS

- A. All work including site safety, equipment, materials, and fabricated items provided under the Contract shall comply with the provisions of the "Occupational Safety and Health Act."

1.03 35 ILL. ADM. CODE 652

- A. CONTRACTOR shall comply with 35 Ill. Adm. Code 652 during the project and shall use protective coatings personnel to carry out corrosion prevention and mitigation methods and use inspectors so that best practices and standards are adhered to.

1.04 35 ILL. ADM. CODE 1100

- A. CONTRACTOR shall comply with 35 Ill. Adm. Code 1100 when disposing of clean construction or demolition debris (CCDD) or uncontaminated soil at a CCDD or uncontaminated soil fill operation.

1.05 ROADWAY LIMITS

- A. CONTRACTOR shall comply with roadway weight restrictions including seasonal weight restrictions.

1.06 PERMITS

- A. No permits were obtained by OWNER for this Project. CONTRACTOR shall obtain required permits. Where the requirements of any permit are more restrictive than the Drawings or the Specifications, the permit requirements shall govern.
- B. A building permit is not required for this project.

1.07 WAGE RATES

- A. CONTRACTOR and any subcontractor shall pay all laborers, workers, and mechanics performing work under the Contract not less than the prevailing wage rates adopted by OWNER or determined by the court on review and filed with the Secretary of State in Springfield. A copy of the Schedule of Prevailing Wage Rates is attached hereto.
- B. CONTRACTOR shall keep or cause to be kept a record of employees and wages paid as required by the Prevailing Wage Act (820 ILCS 130/1-12). CONTRACTOR shall also require each subcontractor employed on the project to keep these same records. In accordance with Illinois Public Act 94-0515, CONTRACTOR shall submit certified payroll records on a monthly basis to OWNER, 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 CONTRACTOR is aware that filing records he or she knows to be false is a Class B misdemeanor.
- C. The certified payroll records shall include for every worker employed on the project the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, number of hours worked each day, and starting and ending time of work each day.
- D. If at the time this Contract is executed, or if during the term of this Contract, there is excessive unemployment in Illinois as defined in the Employment of Illinois Workers on Public Works Act, 30 ILCS 570, as two consecutive months of unemployment exceeding 5%, CONTRACTOR agrees to employ a work force that is comprised of at least 90% Illinois laborers. An "Illinois laborer" is defined as any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.
- E. See Wage Rate Forms bound in the RFP Documents.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 42 00

REFERENCE STANDARDS AND DEFINITIONS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Reference Standards:
 - a. Throughout the Contract Documents, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.
 - b. Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is CONTRACTOR's responsibility to provide materials and workmanship which meet or exceed that specifically named code or standard.
 - c. It is also CONTRACTOR's responsibility, when so required by the Contract Documents, to deliver to ENGINEER all required proof that the material or workmanship, or both, meet or exceed the requirements of the specifically named code or standard.
 - 2. Definitions:
 - a. A substantial amount of specification language constitutes definitions for terms found in other Contract Documents, including the Drawings which must be recognized as diagrammatic in nature and not completely descriptive of requirements indicated thereon.
 - b. Certain terms used in the Contract Documents are defined generally in this section to supplement definitions of the general Contract Documents.
 - c. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the Work.
- B. Related Work Described Elsewhere: The specific naming of codes or standards occurs on the Drawings and in other sections of these Specifications.

1.02 QUALITY ASSURANCE

- A. Familiarity with Pertinent Codes and Standards:
 - 1. It is CONTRACTOR's responsibility to verify the requirements of the specifically named codes and standards and to verify that the items procured for use in this Work meet or exceed the specified requirements.
 - 2. When required by individual sections of these specifications, CONTRACTOR shall obtain a copy of each pertinent code or standard and maintain the copies at the job site during submittals, planning, and progress of the Work until Substantial Completion of the Work is attained.
- B. Overlapping or Conflicting Requirements:
 - 1. Where compliance with two or more industry standards or sets of requirements are specified, and the overlapping of those standards or requirements establishes different or conflicting minimums or levels of quality, the most stringent requirement (which is

generally recognized to be also most costly) is intended and will be enforced, unless more detailed language written directly into Contract Documents clearly indicates that a less stringent requirement is acceptable.

2. Refer all uncertainties to ENGINEER for decision before proceeding.

1.03 REFERENCE STANDARDS

- A. Applicable standards of the construction industry are made a part of the Contract Documents by reference as if copied directly into the Contract Documents, or as if published copies were bound herewith.
- B. Standards referenced directly in the Contract Documents or by governing regulation, have precedence over nonreferenced standards which are recognized in industry for applicability to the Work.
- C. Nonreference standards are hereby defined to have no particular applicability to the Work except as a general measurement of whether the Work complies with standards recognized in the construction industry.
- D. Reference standards and codes listed in these specifications may include, but are not necessarily limited to, standards or codes published by the following agencies and organizations:

1. AA Aluminum Association
1525 Wilson Boulevard, Arlington, VA 22209
2. AAMA American Architectural Manufacturer's Association
1827 Walden Office Square Suite 550, Schaumburg, IL 60173-4268
3. AASHTO American Association of State Highway & Transportation Officials
444 North Capitol Street NW Suite 249, Washington, DC 20001
4. ACI American Concrete Institute
38800 Country Club Drive, Farmington Hills, MI 48331-3439
5. AI Asphalt Institute
2696 Research Park Drive, Lexington, KY 40511-8480
6. AISC American Institute of Steel Construction
One East Wacker Drive Suite 700, Chicago, IL 60601-1802
7. AISI American Iron and Steel Institute
25 Massachusetts Avenue NW Suite 800, Washington, DC 20001
8. ANSI American National Standards Institute
25 West 43rd Street, New York, NY 10036
9. APA American Plywood Association
7011 South 19th, Tacoma, WA 98466-5333

10. API American Petroleum Institute
1220 L Street NW, Washington, DC 20005-4070
11. ARI Air-Conditioning & Refrigeration Institute
4100 North Fairfax Drive Suite 200, Arlington, VA 22203
12. ASHRAE American Society of Heating, Refrigerating, and Air Conditioning Engineers
1791 Tullie Circle NE, Atlanta, GA 30329
13. ASME American Society of Mechanical Engineers
Two Park Avenue, New York, NY 10016-5990
14. ASSE American Society of Sanitary Engineering
901 Canterbury Suite A, Westlake, OH 44145
15. ASTM ASTM International
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959
16. AWI Architectural Woodwork Institute
46179 Westlake Drive Suite 120, Potomac Falls, VA 20165-5874
17. AWPA American Wood Protection Association
P.O. Box 361784, Birmingham, AL 35236-1784
18. AWS American Welding Society
8669 Doral Boulevard Suite 130, Doral, FL 33166
19. AWWA American Water Works Association
6666 West Quincy Avenue, Denver, CO 80235
20. BHMA Builder's Hardware Manufacturers Association
355 Lexington Avenue 15th floor, New York, NY 10017
21. BIA Brick Industry Association
1850 Centennial Park Drive Suite 301, Reston, VA 20191
22. CRSI Concrete Reinforcing Steel Institute
9333 North Plum Grove Road, Schaumburg, IL 60173
23. DOT U.S. Department of Transportation
1200 New Jersey Avenue, SE, Washington, DC 20590
24. EJMA Expansion Joint Manufacturers Association
25 North Broadway, Tarrytown, NY 10591
25. FM FM Global
FM Global Corporate Offices, 270 Central Avenue, Johnston, RI 02919

26. FTI Facing Tile Institute
Box 8880, Canton, OH 44711
27. GA Gypsum Association
6525 Belcrest Road Suite 480, Hyattsville, MD 20782
28. GANA Glass Association of North America
800 SW Jackson Street Suite 1500, Topeka, KS 66612-1200
29. ICC International Code Council
500 New Jersey Avenue NW 6th Floor, Washington, DC 20001
30. IES Illuminating Engineering Society
120 Wall Street, Floor 17, New York, NY 10005-4001
31. MIL Military Specifications
Naval Publications and Forms Center
5801 Tabor Avenue, Philadelphia, PA 19120
32. NAAMM National Association of Architectural Metal Manufacturers
800 Roosevelt Road Building C Suite 312, Glen Ellyn, IL 60137
33. NCMA National Concrete Masonry Association
13750 Sunrise Valley Drive, Herndon, VA 20171-4662
34. NECA NECA
National Electrical Contractors Association
3 Bethesda Metro Center Suite 1100, Bethesda, MD 20814
35. NEMA National Electrical Manufacturers Association
1300 North 17th Street Suite 1752, Rosslyn, VA 22209
36. NFPA National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169-7471
37. NIST National Institute of Standards and Technology
(U.S. Department of Commerce), 100 Bureau Drive, Stop 1070
Gaithersburg, MD 20899-1070
38. NRCA National Roofing Contractors Association
10255 West Higgins Road Suite 600, Rosemont, IL 60018-5607
39. NSF National Sanitation Foundation International
P.O. Box 130140, 789 North Dixboro Road, Ann Arbor, MI 48113-0140
40. OSHA Occupational Safety & Health Administration
200 Constitution Avenue NW, Washington, DC 20210

- 41. PCA Portland Cement Association
5420 Old Orchard Road, Skokie, IL 60077
- 42. PCI Prestressed Concrete Institute
200 West Adams Street Suite 2100, Chicago, IL 60606
- 43. SAE Society of Automotive Engineers
SAE World Headquarters
400 Commonwealth Drive, Warrendale, PA 15096-0001
- 44. SDI Steel Deck Institute
P.O. Box 25, Fox River Grove, IL 60021
- 45. SDI Steel Door Institute
30200 Detroit Road, Westlake, OH 44145-1987
- 46. SIGMA Sealed Insulating Glass Manufacturers Assoc.
401 North Michigan Avenue Suite 2400, Chicago, IL 60611
- 47. SJI Steel Joist Institute
234 Cheves Street, Florence, SC 29501
- 48. SMACNA Sheet Metal and Air Conditioning
Contractor's National Association
4201 Lafayette Center Drive, Chantilly, VA 20151-1219
- 49. SSPC Society for Protective Coatings
40 24th Street 6th Floor, Pittsburgh, PA 15222-4656
- 50. TCA Tile Council of America
100 Clemson Research Boulevard, Anderson, SC 29625
- 51. UL Underwriters Laboratories
333 Pfingston Road; Northbrook, IL 60062

1.04 SUBMITTALS

- A. For OWNER's records, CONTRACTOR shall submit copies of permits, licenses, certifications, inspection reports, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

1.05 DEFINITIONS

- A. Indicated:
 - 1. The term "indicated" is a cross-reference to details, notes, or schedules on the drawings, to other paragraphs or schedules in the specifications and to similar means of recording requirements in the Contract Documents.

2. Where terms such as “shown,” “noted,” “scheduled,” and “specified” are used in lieu of “indicated,” it is for the purpose of helping the reader locate cross-reference, and no limitation is intended except as specifically noted.
- B. Approve (or Words of Similar Nature):
1. Where used in conjunction with ENGINEER's response to submittals, requests, applications, inquiries, reports, and claims by CONTRACTOR, the meaning of the term “approve” will be held to the limitation of ENGINEER's responsibilities and duties as indicated below.
 2. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed,” or terms of like effect or import to authorize an exercise of professional judgment by ENGINEER. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to any provision of the Contract Documents.
 3. In no case will “approval” by ENGINEER be interpreted as a release of CONTRACTOR from responsibility to fulfill requirements of the Contract Documents.
- C. Minimum Requirements:
1. Indicated requirements are for a specific minimum acceptable level of quality or quantity, as recognized in the industry.
 2. Actual work must comply with (or within specified tolerances) or exceed minimums.
 3. CONTRACTOR shall refer uncertainties to ENGINEER before proceeding.
- D. Abbreviations: Abbreviations, where not defined in the Contract Documents, will be interpreted to mean the normal construction industry terminology.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 45 00

QUALITY CONTROL

PART 1—GENERAL

1.01 SUMMARY

- A. Work Includes:
 - 1. Quality Assurance—Control of Installation.
 - 2. Tolerances.
 - 3. Manufacturers' Field Services and Reports.

1.02 QUALITY ASSURANCE—CONTROL OF INSTALLATION

- A. CONTRACTOR shall monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce Work of specified quality.
- B. CONTRACTOR shall comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, CONTRACTOR shall request clarification from ENGINEER before proceeding.
- D. CONTRACTOR shall comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Work shall be performed by persons qualified to produce workmanship of specified quality.
- F. CONTRACTOR shall secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.03 TOLERANCES

- A. CONTRACTOR shall monitor tolerance control of installed products to produce acceptable work and shall not permit tolerances to accumulate.
- B. CONTRACTOR shall comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, CONTRACTOR shall request clarification from ENGINEER before proceeding.
- C. CONTRACTOR shall adjust products to appropriate dimensions; position before securing products in place.

1.04 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification sections or when requested by ENGINEER, CONTRACTOR shall require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, and quality of workmanship.

- B. CONTRACTOR shall submit qualifications of observer to ENGINEER 30 days in advance of required observations.
- C. CONTRACTOR shall report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. CONTRACTOR shall submit report in duplicate within 30 days of observation to ENGINEER for information.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 50 00
TEMPORARY FACILITIES

PART 1-GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Temporary utilities.
 - 2. Temporary stairs and access.
 - 3. Temporary support facilities.
 - 4. Removal of temporary facilities.
- B. CONTRACTOR shall arrange for and provide temporary facilities as required for proper and expeditious prosecution of the Work.
- C. CONTRACTOR shall pay all costs, except as otherwise specified, until final acceptance of the Work unless OWNER makes arrangements for use of completed portions of the Work after substantial completion in accordance with the provisions of any general contract document.
- D. CONTRACTOR shall make all temporary connections to utilities and services in locations acceptable to OWNER and local authorities having appropriate jurisdiction.
 - 1. Furnish all necessary labor and materials.
 - 2. Make all installations in a manner subject to the acceptance of such authorities and OWNER.
 - 3. Maintain such connections.
 - 4. Remove temporary installation and connection when no longer required.
 - 5. Restore services and sources of supply to proper operating conditions.

1.02 TEMPORARY UTILITIES

- A. Temporary Toilets: CONTRACTOR may use OWNER's toilet facilities. CONTRACTOR is responsible for cleaning the facilities after use and for restocking OWNER's supplies that are used by CONTRACTOR.
- B. Temporary Electrical Services:
 - 1. Existing outlets and wiring shall not be used for motors larger than fractional HP or for welding equipment. Circuits for larger motors and welding equipment may be provided with special circuits to mains of electrical panels at the expense of those trades requiring them, provided that written permission is obtained from OWNER and ENGINEER.
 - 2. Any temporary electrical services required during power outages shall be obtained and paid for by CONTRACTOR.
 - 3. All temporary lighting required for construction as well as OWNER's full use of the entire facility throughout construction shall be provided by CONTRACTOR.
 - 4. No permanent electrical equipment or wiring shall be used without express written permission of OWNER. Such approval, if given, shall not affect guarantee period.

- C. Temporary Water: CONTRACTOR shall supply its own water during construction. CONTRACTOR shall also provide its own piping, valves, and appurtenances for its requirements. Connection to the existing water system shall be coordinated with OWNER and shall meet all code requirements including disinfection and backflow prevention. OWNER's existing plant water is non-potable and shall not be used as a potable water source.
- D. Temporary Fire Protection: CONTRACTOR and Subcontractor(s) who maintain or provide an enclosed shed or trailer shall provide and maintain in operating order in each shed or trailer a minimum of one fire extinguisher. More extinguishers shall be provided as necessary. Fire extinguishers shall be minimum dry chemical, nonfreezing-type, UL rating 2A-30BC, with 10-pound capacity for Class A, B, and C fires.

1.03 TEMPORARY STAIRS AND ACCESS

- A. CONTRACTOR shall provide and maintain all equipment such as temporary stairs, ladders, ramps, runways, chutes, and so on as required for proper execution of the Work. CONTRACTOR shall be responsible for providing its own scaffolds, hoists, etc.
- B. All such apparatus, equipment, and construction shall meet all requirements of OSHA, the labor laws, and other applicable State and local laws. Provide stairs with handrails. As soon as possible and where applicable, permanent stairs shall be installed.
- C. Provide barricades at hazardous locations, complete with signs, temporary general lighting, warning lights, and similar devices as required.

1.04 TEMPORARY SUPPORT FACILITIES

- A. CONTRACTOR shall provide whatever facilities and services which may be needed to properly support primary construction process and meet compliance requirements and governing regulations.
- B. CONTRACTOR shall not use permanent facilities except as otherwise indicated, unless authorized by OWNER.

1.05 REMOVAL OF TEMPORARY FACILITIES

- A. Remove temporary materials, equipment, services, and construction as soon as practicable but no later than just prior to substantial completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities and restore existing facilities used during construction to specified, or to original, condition.
- C. Minor temporary facilities which interfere with OWNER's operations shall be removed at the end of each Work period.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 52 13
FIELD OFFICES AND SHEDS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Materials, equipment, and furnishings.
 - 2. Construction.
 - 3. Environmental control.
 - 4. Storage areas and sheds.
 - 5. Preparation.
 - 6. Maintenance and Cleaning.
 - 7. Removal.

PART 2—PRODUCTS

2.01 MATERIALS, EQUIPMENT, AND FURNISHINGS

- A. Materials, equipment, and furnishings shall be serviceable, new or used, and adequate for required purpose.

2.02 CONSTRUCTION

- A. CONTRACTOR shall provide structurally sound, secure, weathertight enclosures for storage spaces.
- B. Temperature transmission resistance of floors, walls, and ceilings shall be compatible with storage requirements.
- C. Exterior materials shall be weather resistant.
- D. Provide appropriate type fire extinguisher at each storage area.
- E. Interior materials in storage sheds shall be as required to provide specified conditions for storage of products.

2.03 ENVIRONMENTAL CONTROL

- A. Heating and ventilation for storage spaces shall be as needed to maintain products in accordance with Contract Documents and to provide adequate lighting for maintenance and observation of products.

2.04 STORAGE AREAS AND SHEDS

- A. Provide storage areas and sheds of size to meet storage requirements for products of individual sections, allowing for access and orderly provision for maintenance and for observation of products to meet requirements of Section 01 60 00—Materials and Equipment.

PART 3-EXECUTION

3.01 PREPARATION

- A. CONTRACTOR shall fill and grade sites for temporary structures to provide drainage away from buildings.

3.02 MAINTENANCE AND CLEANING

- A. CONTRACTOR shall maintain approach walks free of mud, water, and snow.

3.03 REMOVAL

- A. Upon final acceptance and completion of the Work, CONTRACTOR shall remove storage areas, sheds, and debris and shall restore areas to original or better condition. Ruts left by vehicles or depressions from sheds or stored materials or debris will not be acceptable and must be restored to original or better condition.

END OF SECTION

SECTION 01 57 00
TEMPORARY CONTROLS

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Dust Control.
 - 2. Noise Control.
 - 3. Traffic Control.
 - 4. Site Security.
 - 5. Daily Cleanup.

PART 2–PRODUCTS

NOT APPLICABLE

PART 3–EXECUTION

3.01 DUST CONTROL

- A. CONTRACTOR shall execute the Work by methods to minimize raising dust from construction operations.
- B. CONTRACTOR shall provide positive means to prevent airborne dust from dispersing into atmosphere.
- C. CONTRACTOR shall provide partitions, enclosures, etc., within buildings as necessary to confine dust and protect adjacent areas.

3.02 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize noise produced by construction operations.

3.03 TRAFFIC CONTROL

- A. CONTRACTOR shall be responsible for providing all signs, barricades, flagmen, and other traffic control devices in the construction zone.
- B. Conduct operations with minimum interference to roadways.
- C. Maintain two-way traffic on streets at all times.
- D. All traffic control measures shall meet the requirements of Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, Latest Edition, and the Standard Specifications for Traffic control Items, Latest Edition.

E. Do not close or obstruct roadways without approval of OWNER.

3.04 SITE SECURITY

- A. CONTRACTOR shall at all times provide such permanent and temporary fencing or barricades or other measures as may be necessary to restrict unauthorized entry to its construction area. Site security measures shall include safeguards against attractive nuisance hazards as a result of construction activity.
- B. CONTRACTOR shall at all times be responsible for the security of the Work including materials and equipment. OWNER will not take any responsibility for missing or damaged equipment, tools, or personal belongings. CONTRACTOR shall have the sole responsibility of safeguarding the Work and the Site throughout the duration of the Project.

3.05 DAILY CLEANUP

- A. CONTRACTOR shall clean up the Site and remove all rubbish on a daily basis.

END OF SECTION

SECTION 01 60 00
MATERIALS AND EQUIPMENT

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: CONTRACTOR shall be responsible for the delivery, handling, storage and protection of all material and equipment required to complete the Work as specified herein.
- B. Related Sections and Divisions: Specific requirements for the handling and storage of material and equipment are described in other sections of these Specifications.

1.02 PRODUCTS

- A. Components required to be supplied in quantity within a Specification section shall be the same, and shall be interchangeable.
- B. CONTRACTOR shall not use materials and equipment removed from existing construction, except as specifically required, or allowed, by the Contract Documents.
- C. When any construction deviations from the Drawings and/or Specifications necessary to accommodate equipment supplied by CONTRACTOR, result in additional costs to CONTRACTOR or other contractors, such additional costs shall be borne by CONTRACTOR. CONTRACTOR shall also pay any additional costs necessary for revisions of Drawings and/or Specifications by ENGINEER.
- D. Each major component of equipment shall bear a nameplate giving the name and address of the manufacturer and the catalogue number or designation.

1.03 TRANSPORTATION AND HANDLING

- A. Materials, products and equipment shall be properly containerized, packaged, boxed, and protected to prevent damage during transportation and handling.
- B. CONTRACTOR shall not overload any portion of the structure in the transporting or storage of materials.
- C. CONTRACTOR shall not damage other construction by careless transportation, handling, spillage, staining or impact of materials.
- D. CONTRACTOR shall provide equipment and personnel to handle products, including those provided by OWNER, by methods to prevent soiling and damage.
- E. CONTRACTOR shall provide additional protection during handling to prevent marring and otherwise damaging products, packaging, and surrounding surfaces.
- F. CONTRACTOR shall handle product by methods to avoid bending or overstressing. Lift large and heavy components only at designated lift points.

1.04 DELIVERY AND RECEIVING

- A. CONTRACTOR shall arrange deliveries of products in accordance with the Progress Schedule, allowing time for observation prior to installation.
- B. CONTRACTOR shall coordinate deliveries to avoid conflict with the Work and conditions at the Site; work activities of other contractors or OWNER; limitations on storage space; availability of personnel and handling equipment and OWNER's use of premises.
- C. CONTRACTOR shall deliver products in undamaged, dry condition, in original unopened containers or packaging with identifying labels intact and legible.
- D. CONTRACTOR shall clearly mark partial deliveries of component parts of equipment to identify equipment and contents to permit easy accumulation of parts and to facilitate assembly.
- E. Immediately on delivery, CONTRACTOR shall inspect shipment to review that:
 - 1. Product complies with requirements of Contract Documents and reviewed submittals.
 - 2. Quantities are correct.
 - 3. Accessories and installation hardware are correct.
 - 4. Containers and packages are intact and labels legible.
 - 5. Products are protected and undamaged.
- F. OWNER will not accept any deliveries of equipment, material, products, or documentation. CONTRACTOR shall have personnel on site to receive all deliveries and perform the required functions noted above. NO EXCEPTIONS.

1.05 STORAGE AND PROTECTION

- A. General:
 - 1. CONTRACTOR shall store products, immediately on delivery, in accordance with manufacturer's instructions, with all seals and labels intact and legible.
 - 2. Any additional off-site space required shall be arranged by CONTRACTOR.
 - 3. CONTRACTOR shall allocate the available storage areas and coordinate their use by the trades on the job.
 - 4. CONTRACTOR shall arrange storage in a manner to provide access for maintenance of stored items and for observation.
- B. In enclosed storage, CONTRACTOR shall:
 - 1. Provide suitable temporary weather tight storage facilities as may be required for materials that will be damaged by storage in the open.
 - 2. Maintain temperature and humidity within ranges stated in manufacturer's instructions.
 - 3. Provide ventilation for sensitive products as required by manufacturer's instructions.
 - 4. Store unpacked and loose products on shelves, in bins, or in neat groups of like items.
 - 5. Store solid materials such as insulation, tile, mechanical and electrical equipment, fittings, and fixtures under shelter, in original packages, away from dampness and other hazards.
 - 6. Store liquid materials away from fire or intense heat and protect from freezing.

- C. At exterior storage, CONTRACTOR shall:
1. Store unit materials such as concrete block, brick, steel, pipe, conduit, door frames, and lumber off ground, out of reach of dirt, water, mud and splashing.
 2. Store tools or equipment that carry dirt outside.
 3. Store large equipment so as not to damage the Work or present a fire hazard.
 4. Cover products subject to discoloration or deterioration from exposure to the elements, with impervious sheet material and provide ventilation to avoid condensation.
 5. Completely cover and protect any equipment or material which is prime coated or finish painted with secured plastic or cloth tarps. Store out of reach of dirt, water, mud and splashing.
 6. Store loose granular materials on clean, solid surfaces such as pavement, or on rigid sheet materials, to prevent mixing with foreign matter.
 7. Provide surface drainage to prevent erosion and ponding of water.
 8. Prevent mixing of refuse or chemically injurious materials or liquids.
 9. Cover aggregates such as sand and gravel in cold wet weather.
 10. Remove all traces of piled bulk materials at completion of work and return site to original or indicated condition.

1.06 MAINTENANCE OF STORAGE

- A. CONTRACTOR shall periodically inspect stored products on a scheduled basis.
- B. CONTRACTOR shall verify that storage facilities comply with manufacturer's product storage requirements, and verify that manufacturer required environmental conditions are maintained continually.
- C. CONTRACTOR shall verify that surfaces of products exposed to the elements are not adversely affected and that any weathering of finishes is acceptable under requirements of Contract Documents.
- D. CONTRACTOR shall perform scheduled maintenance of equipment in storage as recommended by the manufacturer. A record of the maintenance shall be kept and turned over to ENGINEER when the equipment is installed.

1.07 INSTALLATION REQUIREMENTS

- A. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the respective manufacturers, unless otherwise specified.
- B. After installation, CONTRACTOR shall protect all materials and equipment against weather, dust, moisture, and mechanical damage.
- C. CONTRACTOR shall be responsible for all damages that occur in connection with the care and protection of all materials and equipment until completion and final acceptance of the Work by OWNER. Damaged material and equipment shall be immediately removed from the Site.

1.08 EQUIPMENT WARRANTIES

- A. Warranties shall be nonprorated, include all parts and labor, and be in written form. Warranties shall specifically exclude buyer's indemnification language. Warranty language

shall not eliminate manufacturer's responsibility for sizing of the equipment. During warranty period, manufacturer shall be responsible for any travel expenses, outside contractor fees, and rental equipment fees associated with providing warranty service. Manufacturer shall pay expenses incurred for repairs and parts replacement not made by manufacturer if manufacturer's response is not within 72 hours of notification by OWNER. Warranty language shall be provided with the shop drawings.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

SECTION 01 73 29

CUTTING, PATCHING, AND ALTERATIONS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: CONTRACTOR shall be responsible for all cutting, fitting, patching, and other alterations required to complete the Work as specified herein or to:
 - 1. Make its several parts fit together properly.
 - 2. Uncover portions of the Work to install improperly sequenced Work.
 - 3. Remove and replace defective Work.
 - 4. Remove and replace Work not conforming to requirements of the Contract Documents.
 - 5. Remove samples of installed Work as specified for testing.
 - 6. Provide penetrations of surfaces for installation of piping and electrical conduit.
 - 7. Rehabilitate or renovate existing spaces.

1.02 REFERENCES

- A. ANSI A10 Safety Requirements for Construction and Demolition.

1.03 QUALITY ASSURANCE

- A. CONTRACTOR shall perform all cutting, patching, and alterations in strict accordance with pertinent requirements of these Specifications.
- B. Except as modified by governing codes, CONTRACTOR shall comply with the applicable provision and recommendations of ANSI A10.

1.04 SUBMITTALS

- A. CONTRACTOR shall submit a written request to OWNER well in advance of executing any cutting or alteration which affects the following:
 - 1. Work of OWNER or any separate contractor.
 - 2. Structural value or integrity of any element of the Project.
 - 3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
 - 4. Efficiency, operational life, maintenance, or safety of operational elements.
 - 5. Visual qualities of sight-exposed elements.
- B. The request shall include:
 - 1. Description of affected work.
 - 2. The necessity for cutting, patching, or alteration.
 - 3. Effect on work of OWNER, any separate contractor, or on the structural or weather-proof integrity of the Project.
 - 4. Description of proposed work to include:
 - a. Scope of cutting, patching, or alteration.
 - b. Trades who will execute the Work.
 - c. Products proposed to be used.

- d. Extent of refinishing to be done.
 - 5. Alternatives to cutting and patching.
 - 6. Written permission of any separate contractor whose work will be affected.
- C. Submit written notice to OWNER designating the date and the time the Work will be uncovered or executed.

1.05 SCHEDULING AND COORDINATION

- A. All work under this section shall be coordinated with OWNER's work forces and those of other contractors and shall be accomplished at times acceptable to OWNER.
- B. Before starting any work relating to existing utilities (electrical, sewer, water, heat, gas, fire lines, etc.) that will temporarily discontinue or disrupt service to the existing building, notify ENGINEER and OWNER 72 hours in advance and obtain OWNER's approval before proceeding with this phase of the Work. Temporary facilities, if required, shall be in place prior to disruption of service.

PART 2-PRODUCTS

2.01 NEW MATERIALS

- A. For replacement of work removed, CONTRACTOR shall use materials which comply with the pertinent sections of these Specifications.
- B. All new materials for patching and extending work shall match existing products and work.
- C. CONTRACTOR shall determine type and quality of existing products by inspection and any necessary testing and workmanship by use of existing as the standard.

2.02 SALVAGEABLE MATERIAL

- A. Materials or items designated to become the property of OWNER shall be as specified or as shown on the Drawings.
- B. Items which are not to be reinstalled but are to become the property of OWNER shall be removed by CONTRACTOR with care, cleaned, and stored in a location at the Site to be approved by OWNER.
- C. Materials or items damaged in its removal shall be replaced by CONTRACTOR with similar new material at no additional cost to OWNER.

2.03 UNSALVAGEABLE MATERIALS

- A. Materials or items demolished and not designated to become the property of OWNER or not designated to be reinstalled shall become the property of CONTRACTOR and shall be removed from the site and legally and properly disposed of by CONTRACTOR.
- B. Materials shall be removed by CONTRACTOR in a manner that will avoid damage to materials or equipment to remain.

PART 3-EXECUTION

3.01 INSPECTION

- A. CONTRACTOR shall inspect existing conditions including elements subject to movement or damage during cutting, patching, and other alterations.
- B. After uncovering the Work, CONTRACTOR shall inspect conditions affecting installation of new products or performance of new work.
- C. CONTRACTOR shall report unsatisfactory or questionable conditions to ENGINEER in writing.
- D. CONTRACTOR shall not proceed with work until unsatisfactory or questionable conditions are resolved.
- E. Beginning of cutting, patching, and alterations work means acceptance of existing conditions by CONTRACTOR.

3.02 PREPARATION AND PROTECTION

- A. CONTRACTOR shall provide temporary bracing, shoring, needling, and support of the structure during alterations work as necessary to prevent collapse, settling, or deflection and to protect persons and property from injury or damage.
- B. Temporary supports must adequately carry all existing and imposed load.
- C. CONTRACTOR shall provide and maintain temporary protection of surface finishes, equipment, and adjacent work designated to remain where demolition, removal, and new work is being done, connections are being made, materials are being handled, or equipment is being removed.
- D. CONTRACTOR shall provide temporary partitions or barriers to contain all dust, dirt, and debris from entering into finished areas or areas where OWNER is operating, storing, or manufacturing products.
- E. CONTRACTOR shall provide adequate fire protection in accordance with local Fire Department requirements.
- F. CONTRACTOR shall provide waterproofing, weather protection, heat, and other facilities for that portion of the Work which may be exposed by cutting and patching, demolition, or other alterations.
- G. CONTRACTOR shall cut, move, or remove items as necessary for access to alterations and renovations work and replace and restore at completion of the Work.
- H. CONTRACTOR shall prepare surfaces and remove surface finishes to provide for proper installation of new work and new finishes.
- I. CONTRACTOR shall be responsible for any damage to the existing structure or its contents directly or indirectly by its crews or those of its subcontractors.

3.03 PERFORMANCE

- A. CONTRACTOR shall accomplish all Work of cutting, removal, demolition, patching, or other alterations using only persons skilled in the appropriate trade.
- B. CONTRACTOR shall execute the Work in a careful and orderly manner with the least possible disturbance to the public and to the occupants of the building.
- C. CONTRACTOR shall execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs.
- D. CONTRACTOR shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes.
- E. CONTRACTOR shall fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- F. CONTRACTOR shall thoroughly clean and prepare all surfaces to receive new finish or covering to completely remove all dirt, dust, grease, oil, paint, loose materials, and soil.
- G. CONTRACTOR shall refinish entire surface as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish entire unit.

3.04 DEMOLITION, CUTTING, AND REMOVAL

- A. Cutting and removal of construction shall be performed by CONTRACTOR so as not to cut or remove more than is necessary and so as not to damage adjacent work.
- B. CONTRACTOR shall cut out embedded anchorages and attachment items as required to properly provide for patching and repair of the respective finishes.
- C. CONTRACTOR shall not cut structural work in a manner resulting in a reduction of load-carrying capacity or load/deflection ratio.
- D. CONTRACTOR shall not cut operational elements and safety components in a manner resulting in decreased performance, shortened useful life, or increased maintenance.
- E. CONTRACTOR shall not cut work exposed to view (exterior or interior) in a manner resulting in noticeable reduction of visual qualities as determined by OWNER.
- F. Construction that is to remain which is loosened, cracked, or otherwise damaged or defaced as a result of careless cutting or demolition and is unsuitable for use intended shall be removed and replaced at no additional cost to OWNER.
- G. CONTRACTOR shall clean demolished areas and remove debris, waste, and rubbish from the building at the conclusion of each day's work.
- H. CONTRACTOR shall not let piled waste material endanger the structure.

3.05 PATCHING, EXTENDING, AND MATCHING

- A. Patching work shall conform to the standards of the Specifications where applicable, and where not specified, work shall conform to the highest standards of the applicable trade.
- B. CONTRACTOR shall patch construction to match adjacent work unless noted otherwise.
- C. Patching or restoration shall be carried to natural breaks (e.g., corners) wherever possible.
- D. CONTRACTOR shall provide adequate support to substrate for patching finishes.

END OF SECTION

SECTION 01 77 00
CONTRACT CLOSEOUT

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Closeout procedures.
 - 2. Final cleaning.
 - 3. Adjusting.
 - 4. Project record documents.
 - 5. Warranties.

1.02 CLOSEOUT PROCEDURES

- A. CONTRACTOR shall provide submittals to ENGINEER that are required by governing or other authorities.
- B. CONTRACTOR shall comply with any general contract document and complete the following before requesting ENGINEER's observation of the Work or designated portion thereof for substantial completion.
 - 1. Submit executed warranties and similar required documentation for specific units of Work, enabling OWNER's unrestricted use.
 - 2. Submit record documentation, maintenance manuals, tools, spare parts, keys, and similar operational items.
 - 3. Submit consent of surety (if surety is required in the Contract).
 - 4. Complete final cleaning, touch-up work of marred surfaces, and remove temporary facilities and tools.

1.03 FINAL CLEANING

- A. It is CONTRACTOR's responsibility to completely clean up the inside and outside of all buildings in which Work was performed at the completion of the Work.

1.04 ADJUSTING

- A. CONTRACTOR shall adjust operating products and equipment to provide smooth and unhindered operation.

1.05 PROJECT RECORD DOCUMENTS

- A. CONTRACTOR shall maintain on Site one set of the following record documents to record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.

6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. CONTRACTOR shall make entries that are complete and accurate, enabling future reference by OWNER.
- C. CONTRACTOR shall store record documents separate from documents used for construction.
- D. CONTRACTOR shall record information concurrent with construction progress.
- E. Specifications: CONTRACTOR shall legibly mark and record at each Product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by addenda and modifications.
- F. Record Drawings: CONTRACTOR shall legibly mark each item to record actual construction including:
 1. Field changes of dimension and detail.
 2. Details not on original Contract drawings.
- G. Final payment will not be made until Project Record Documents have been submitted by the CONTRACTOR.

1.06 WARRANTIES

- A. CONTRACTOR shall provide warranties beyond project one-year warranty as required by technical sections.
- B. Submit warranty information as follows:
 1. Provide original copies bearing authorized signatures.
 2. Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers, and provide Table of Contents and assemble in three-ring binder with durable cover.
 3. Submit with request for certificate of Substantial Completion.
 4. For items of work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance listing date of acceptance as start of warranty period.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

NOT APPLICABLE

END OF SECTION

Section 01 77 00-2

1586.003/24-1-1

SECTION 01 91 00
STARTING OF SYSTEMS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. General.
 - 2. Demonstration, Instructions, and Operator Training.
 - 3. Start-Up and Testing.
 - 4. Equipment Systems Requiring Additional Documentation.
- B. CONTRACTOR shall perform the Work described in the following subsections.

1.02 GENERAL

- A. The number of days for manufacturer's services stated in the Specifications shall be considered as the minimum number of days. Should additional time be required for services because of equipment malfunction or other problem, such time shall be at the expense of CONTRACTOR, with no change in Contract Price.
- B. "Days" specified shall consist of 8-hour days on-site, excluding travel time.
- C. CONTRACTOR shall designate and provide one person to be responsible for scheduling, coordinating, and expediting the specified services. Scheduling the services shall be done in cooperation with, and with the prior approval of ENGINEER and OWNER. Such schedule shall be arranged with the appropriate subcontractors, manufacturers, and suppliers with sufficient time to allow their compliance with the service requirements.
- D. CONTRACTOR shall manage equipment checkout such that checkout has been completed and deficiencies addressed prior to demonstration and training. Scheduling training prior to checkout may result in cancellation when checkout cannot be completed prior to training.

1.03 DEMONSTRATION, INSTRUCTIONS, AND OPERATOR TRAINING

- A. CONTRACTOR shall coordinate the pre-start-up training periods with OWNER's operating personnel and manufacturers' representatives.
 - 1. Schedule training dates and times with OWNER, that are acceptable to the OWNER, using equipment, startup, and O&M training form. Normal hours available for training are between 7:30 A.M. to 3 P.M., Monday through Friday, except for holidays.
 - 2. Submit outline and presentation to ENGINEER at least 7 days in advance of training.
 - 3. Provide name, contact information, and brief synopsis of qualifications of the trainer.
 - 4. If materials above are not provided at least 7 days in advance, training may be canceled.
 - 5. Failure of supplier's or manufacturer's representative to appear for scheduled training, failure to notify OWNER 24 hours in advance of need to cancel scheduled training or failure to arrive within 30 minutes of start of scheduled training shall

result in reimbursement to OWNER for time lost by OWNER's personnel in waiting for arrival of manufacturer's representative. Except in case of failure to arrive on time, time will not exceed 1 hour for each employee scheduled to receive training. Failure to arrive on time will be reimbursed by actual time late, up to 1 hour, after 1 hour, training will be rescheduled. CONTRACTOR shall reimburse OWNER via a change order.

6. During the training, instructor will dedicate its time solely to training and not start-up services.
 7. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with OWNER's personnel in detail to explain all aspects of operation and maintenance.
 8. Demonstrate start-up, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment.
 9. Prepare and insert additional data in operation and maintenance manuals when need for additional data becomes apparent during instruction.
 10. OWNER may videorecord the training for future internal use. Provide to OWNER paper and electronic copies of any media used as part of training.
 11. Provide training handouts for each of OWNER's personnel present.
- B. CONTRACTOR shall provide attached Certificate of Operator Training cosigned by OWNER and supplier's representative verifying training was accomplished to satisfaction of all parties.
- C. Operation and maintenance manual submitted in accordance with Section 01 33 00—Submittals shall be provided prior to operator training.
- D. Final payment for various items of equipment will not be made by OWNER until the equipment is operating to OWNER's satisfaction.
- E. Where items of equipment are placed into service at different times or sequence, manufacturer's services for start-up, field testing, and supervision shall be provided for each time or sequence. Training shall be provided prior to or at the time the first similar item of equipment is placed in service.

1.04 START-UP AND TESTING

- A. Prior to acceptance of any portion of the Work, start-up and testing of all equipment and testing of all materials furnished on the Project by CONTRACTOR shall have been conducted in the presence of representatives of CONTRACTOR, OWNER, and ENGINEER and also manufacturer if requested by OWNER or ENGINEER.
- B. CONTRACTOR shall provide whatever temporary installations and conditions are necessary in order to perform start-up and testing operations on all equipment and materials furnished under the Contract.
- C. All temporary installations and conditions shall be removed by CONTRACTOR upon completion of start-up and testing.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

3.01 EQUIPMENT SYSTEMS REQUIRING ADDITIONAL DOCUMENTATION

- A. Section 26 09 00-Controls and Instrumentation: Documented date(s) of CONTRACTOR written request for On-Site Acceptance Test.

END OF SECTION

TS No. _____

EQUIPMENT START-UP AND O&M TRAINING SCHEDULING FORM
STRAND ASSOCIATES, INC.®

PROJECT _____ CLIENT _____

CONTRACT _____

CONTRACTOR _____ Date: _____

The following equipment is scheduled for start-up on _____

EQUIPMENT NAME: _____ SPECIFICATION SECTION: _____

MANUFACTURER: _____ MINIMUM HOURS OF TRAINING: _____

DATE O&M MANUALS SUBMITTED: _____

Specification Section 01 91 00 requires that start-up and operation and training be conducted by a qualified manufacturer's representative prior to placing equipment in operation. Review Specification Sections 01 33 00 and 01 45 00 and the individual equipment sections for start-up and training requirements. OWNER may find it necessary to propose alternate dates for training based on conflicts with other training and staff availability. The Operation and Maintenance Manuals must be submitted prior to training.

After the equipment or system has been properly installed and is functioning correctly, submit a written report in accordance with Specification Section 01 45 00.

Submit the completed form to ENGINEER and OWNER at least 7 days prior to start-up and training.

Proposed Training Date: _____ Time of Training: _____

Factory-trained representative giving training:

Name(s): _____

Company: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

CERTIFICATE OF OPERATOR TRAINING

Project_____

Equipment_____

Specification Section_____

Contract_____

I hereby certify the equipment supplier/manufacture has instructed OWNER's personnel in the start-up operation and maintenance of this equipment as required in the Specifications.

MANUFACTURER'S REPRESENTATIVE

Signature_____Date_____

Name (print)_____

Title_____

Representing_____

CONTRACTOR

Signature_____Date_____

Name (print)_____

Title_____

OWNER

I hereby state that my operating personnel received instruction for start-up, operation, and maintenance of this equipment.

Signature_____Date_____

Name (print)_____

Title_____

END SECTION

Section 01 91 00-5

1586.003/24-1-1

SECTION 26 05 00

GENERAL ELECTRICAL REQUIREMENTS

PART 1—GENERAL

1.01 SUMMARY

- A. Work includes general requirements for all electrical work.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern Work in this section.

1.02 REFERENCES

- A. ANSI/NFPA 70—National Electrical Code (NEC).
- B. ANSI/IEEE C2—National Electrical Safety Code.

1.03 CONTRACT DOCUMENTS

- A. Any equipment roughed in improperly and/or not positioned on implied centerlines or as dictated by good practice shall be repositioned at no cost to OWNER.
- B. The Drawings are generally diagrammatic, and CONTRACTOR shall coordinate the Work so that interferences are avoided. Provide all offsets in conduit, fittings, etc., necessary to properly install the work. All offsets, fittings, etc., shall be provided without additional expense to OWNER.

1.04 REGULATORY REQUIREMENTS

- A. Conform to ANSI/NFPA 70.
- B. Conform to ANSI/IEEE C2.
- C. The rules and regulations of the federal, state, local, and civil authorities and utility companies in force at the time of execution of the Contract shall become a part of this specification.
- D. Obtain electrical inspections from authority having jurisdiction. Costs for inspections shall be paid by CONTRACTOR.

1.05 CODES AND ORDINANCES

- A. CONTRACTOR is expected to know or to ascertain, in general and in detail, the requirements of all codes and ordinances applicable to the construction and operation of systems covered by this Contract. CONTRACTOR shall know or ascertain the rulings and interpretations of code requirements being made by all authorities having jurisdiction over the work to be performed by them.

- B. In preparing a Bid, CONTRACTOR shall include the cost of all items and procedures necessary to satisfy the requirements of all applicable codes, ordinances, and authorities, whether or not these are specifically covered by the Drawings and Specifications. All cases of apparent conflicts between the Drawings, Specifications, and codes shall be brought to ENGINEER's attention, as herein before specified. CONTRACTOR shall carry out work and complete construction as required by applicable codes and ordinances and in such a manner as to obtain approval of all authorities whose approval is required.
- C. When requested by ENGINEER, CONTRACTOR shall provide written calculations to show compliance with applicable codes or the Contract Documents. This shall include, but not be limited to, conduit and wire sizing, junction and pull box fill and sizing, conductor derating, and voltage drop. CONTRACTOR shall indicate calculation method used as well as compliance with applicable code, drawing, or specification.

1.06 ELECTRICAL DISTRIBUTION SYSTEM

- A. Provide a complete electrical distribution system consisting of components indicated on the Drawings or specified herein including, but not limited to:
 - 1. All control wiring.
 - 2. Access panels and access doors for access to equipment installed by Division 26.
 - 3. Support system design and supports for electrical raceways.
- B. Provide balancing and adjusting of electrical loads.
- C. CONTRACTOR shall instruct OWNER's representative in the operation and maintenance of all equipment. The instruction shall include a complete operating cycle on all apparatus.
- D. Provide miscellaneous items for a complete and functioning system as indicated on the Drawings and specified herein.
- E. A partial list of work not included in Division 26 is as follows: Painting (except as otherwise specified herein).

1.07 NOISE

- A. Eliminate any abnormal noises that are not considered by ENGINEER to be an inherent part of the systems as designed. Abnormal buzzing in equipment components will not be acceptable.

1.08 DRAWINGS

- A. The Drawings indicate approximate locations of the various items of the electrical systems. These items are shown approximately to scale and attempt to show how these items should be integrated with building construction. Locate all the various items by on-the-job measurements in conformance with Contract Documents and cooperation with other trades.
- B. Prior to locating equipment, confer with ENGINEER as to desired location in the various areas. In no case should equipment locations be determined by scaling drawings. Relocate equipment and bear cost of redoing work or other trades' work necessitated by failure to comply with this requirement.

- C. In certain instances, electrical devices and equipment, etc., may be relocated. Where relocation is within 10 feet of location shown on the Drawings, and when CONTRACTOR is informed of necessary relocation before work is begun on this portion of the job, the relocation shall be at CONTRACTOR's expense.
- D. The Drawings are schematic in nature and are not intended to show exact locations of conduit, but rather to indicate distribution, circuitry, and control.

1.09 SUBMITTALS

- A. CONTRACTOR shall submit to ENGINEER for approval prior to beginning work, shop drawings on the equipment and materials proposed to be furnished and installed. See Section 01 33 00–Submittals for requirements.
- B. CONTRACTOR shall, in addition, submit drawings and/or diagrams for review and for job coordination in all cases where deviation from the Contract Drawings are contemplated because of job conditions, interference or substitution of equipment, or when requested by ENGINEER for purposes of clarification of CONTRACTOR's intent. CONTRACTOR shall also submit detailed drawings, rough-in sheets, etc., for all special or custom-built items or equipment. Drawings and details under this section shall include, but not be limited to, electrical interconnection wiring diagrams; see Section 26 09 00–Controls and Instrumentation, where applicable to this project:
- C. These drawings and diagrams shall show applicable electrical switch and breaker sizes as well as the manufacturer's name and catalog number for each piece of equipment used.
- D. Equipment and material submittals must show sufficient data to indicate complete compliance with Contract Documents as follows:
 - 1. Proper sizes and capacities.
 - 2. That the item will fit in the available space in the manner that will allow proper service.
 - 3. Construction materials and finishes.
- E. When the manufacturer's reference numbers are different from those specified, provide correct cross-reference number for each item. The shop drawings shall be clearly marked and noted accordingly.
- F. When equipment and items specified include accessories, parts, and additional items under one designation, shop drawings shall be complete and include all components.
- G. See additional requirements of shop drawings under Division 01–General Requirements.

PART 2–PRODUCTS

2.01 STANDARD PRODUCTS

- A. All equipment and products shall be of new manufacture per applicable specifications.
- B. All equipment shall be UL and NEMA approved.

- C. All equipment and wiring shall be selected and installed for conditions in which it will perform (e.g., general purpose, weatherproof, raintight, explosionproof, dustproof, or any other special type).

2.02 SUBSTITUTION OF MATERIALS AND EQUIPMENT

- A. While it is not the intention of OWNER to discriminate against any manufacturer of equipment which may be equivalent to specified equipment, a strict interpretation of such equivalency will be exercised in considering any equipment offered as a substitute for specified equipment. CONTRACTOR shall submit with each request for approval of substitute material or equipment sufficient data to show conclusively that it is equivalent to that specified in the following respects:
 - 1. Performance:
 - a. Capacity at conditions and operating speeds scheduled shall be equal to or greater than that of the specified equipment.
 - b. Energy consumption at the point of rating shall not exceed that of the specified equipment.
 - c. Vibration and noise production at the point of rating shall not exceed that of the specified equipment.
 - 2. Materials of construction.
 - 3. Gauges, weights, and sizes of all portions and component parts.
 - 4. Design arrangements, methods of construction, and workmanship.
 - 5. Coatings, finishes, and durability of wearing parts.
 - 6. National reputation of the manufacturer as a producer of first quality equipment of the type under consideration.
 - 7. Availability of prompt, reliable, and efficient service facilities franchised by or affiliated with the equipment manufacturer. This shall include the maintenance of local stocks of critical replacement parts equal to those maintained for the specified equipment.
- B. Requests for substitution shall include CONTRACTOR's reason for the request.
- C. If ENGINEER does not consider the items equivalent to those specified, CONTRACTOR shall provide those specified.
- D. See General Conditions for additional requirements.

2.03 LOW-VOLTAGE WIRING (LESS THAN 100 VOLTS)

- A. Low-voltage wiring specified in this section shall be applicable to all systems installed that utilize low-voltage wiring where such wiring is not specified in other technical sections.
- B. All wiring shall have copper conductors with 300-volt insulation rating and meet the requirements of NEC Article 725.
- C. All conductors must be suitable for the application intended. Conductors 16 AWG and larger shall be stranded. Conductors 18 AWG and smaller may be solid or stranded.
- D. Control Cable for Class 1 Remote Control and Signal Circuits: Individual conductors twisted together, shielded, and covered with an overall PVC jacket. Cable shall be UL listed, temperature rated, and plenum or nonplenum rated for the application as required in the National Electrical Code.

- E. Control Cable for Class 2 or Class 3 Remote Control and Signal Circuits shall be constructed, UL listed, temperature rated, and plenum or nonplenum rated for the application as required in the NEC Article 725.

PART 3—EXECUTION

3.01 CONTINUITY OF SERVICE

- A. CONTRACTOR shall provide and maintain continuous services (power, controls, alarms, etc.) during the entire construction period.
- B. No service shall be interrupted or changed without permission from OWNER. Written permission shall be obtained before any work is started.
- C. When interruption of service is required, all persons concerned shall be notified and a prearranged time agreed upon. Notice shall be a minimum of 72 hours prior to the interruption.

3.02 CLEANUP AND REMOVAL OF RUBBISH

- A. All lighting and appliance panelboards, MCCs, VFD enclosures, motor starter and disconnect switch enclosures, junction boxes, and pullboxes shall be cleaned of debris and wires neatly arranged with surplus length cut off before installation of covers.
- B. Equipment shall be thoroughly cleaned of all stains, paint spots, dirt, and dust. All temporary labels not used for instruction or operation shall be removed.

3.03 PAINTING

- A. All painting of electrical equipment shall be done by CONTRACTOR unless equipment is specified to be furnished with factory-applied finish coats.
- B. All electrical equipment shall be provided with factory-applied prime finish, unless otherwise specified.
- C. If the factory finish on any equipment furnished by CONTRACTOR is damaged in shipment or during construction, the equipment shall be refinished by CONTRACTOR.
- D. One can of touch-up paint shall be provided for each different color factory finish which is to be the final finished surface of the product.

3.04 CAULKING

- A. Caulk with a caulking sealant where indicated on the electrical drawings or hereinafter specified.
- B. Caulking sealant shall be silicone construction sealant as manufactured by General Electric or two-part polysulfide conforming to the requirements and bearing the seal of the Thiokol Chemical Corporation.

- C. Caulking sealant shall contain no acid or ingredients that will stain stone, corrode metal, or have injurious effect on painting. It shall be colored to match adjacent surroundings.

3.05 BUILDING ACCESS

- A. CONTRACTOR shall arrange for the necessary openings in the building to allow for admittance of all apparatus.
- B. When the installation requires openings and access through existing construction and the openings are not provided, CONTRACTOR shall provide the necessary openings.

3.06 COORDINATION

- A. Provide wiring for all electrically controlled equipment.
- B. CONTRACTOR shall provide all line voltage power and control wiring (100 volts and above), and all low-voltage control wiring (below 100 volts).
- C. CONTRACTOR shall connect and wire all apparatus according to approved wiring diagrams furnished by the various trades.

3.07 EQUIPMENT ACCESS AND LOCATION

- A. CONTRACTOR shall coordinate work of this division with that of other divisions so that all systems, equipment, and other components of the building will be installed at the proper time, will fit the available space, and will allow proper service access to those items requiring maintenance. This means adequate access to all equipment not just that installed under this division. Any components for the electrical systems that are installed without regard to the above shall be removed and relocated as required to provide adequate access at CONTRACTOR's expense.
- B. Where various items of equipment and materials are specified and scheduled, the purpose is to define the general type and quality level, not to set forth the exact trim to fit the various types of ceiling, wall, or floor finishes. Provide materials that will fit properly the types of finishes actually installed.
- C. All equipment, junction and pull boxes, and accessories shall be installed to permit access to equipment for maintenance. Any relocation of conduits, equipment, or accessories to provide maintenance access shall be accomplished by CONTRACTOR at no additional cost.
- D. Electrical equipment, devices, instruments, hardware, etc., shall be installed with ample space allowed for removal, repair, calibration or changes to the equipment. Ready accessibility to equipment and wiring shall be provided without moving other equipment that is to be installed or that is already in place.
- E. Locate equipment to fit the details, panels, decorating, or finish of the space. ENGINEER shall reserve the right to make minor position changes of the equipment before the work has been installed.

3.08 WORKMANSHIP

- A. All work shall be performed in compliance with the NEC.
- B. Install work using procedures defined in NECA Standard of Installation.
- C. Location of process equipment as shown on the Drawings is approximate.
- D. Utilization equipment and control devices required under these specifications shall be mounted in a code-approved manner.
- E. Locations of utilization equipment and control devices as shown on the Drawings are within 10 feet of actual positions. Any mounting of this equipment within this 10-foot distance shall be performed at no additional cost to OWNER.
- F. Unless otherwise noted, conduit shall be fastened to building structure or equipment framework and not placed on the floor.
- G. Where materials, equipment apparatus, or other products are specified by manufacturer, brand name, and type or catalog number, such designation is to establish standards of desired quality and style and shall be the basis of the Bid.
- H. Materials and equipment of the types for which there are National Board of Fire Underwriters Laboratories (UL) listings shall be so labeled and shall be used by CONTRACTOR.

3.09 AREA CLASSIFICATION

- A. As noted on the Drawings.
- B. Where referenced herein, damp and wet locations shall include, but not be limited to, structures and areas below grade and exterior locations.

3.10 MODIFICATIONS TO EXISTING CONSTRUCTION

- A. Alterations:
 - 1. Alter, extend, and reconnect conduits as necessary.
 - 2. Reconnect existing conduits that were reused, cut, or exposed because of construction as quickly as possible.
 - 3. Where wiring is involved, new wires shall be "pulled in" between the nearest available accessible reused outlets to the extent allowed by the governing code.
 - 4. Provide new conduits for wires if they cannot be "pulled in" to existing conduits.
 - 5. All new conduits, wiring, and electrical items shall be connected to the existing systems so as to function as a complete unit.
 - 6. Where existing electrical equipment, devices, fixtures, electrically operated items, etc., interfere with any remodeling work, they shall be removed and reinstalled in another location to avoid such interferences. All existing and relocated equipment shall be left in good operating condition.
- B. CONTRACTOR shall remove all electrical equipment, conduit, and wiring associated with the structures, equipment, and control systems specified herein and/or shown on the Drawings to be removed.

- C. Include in Bid removal of existing electrical material and equipment as specified hereinafter, as noted on the Drawings, or as needed by field conditions.
- D. Provide stainless steel cover plates for all existing recessed outlet and junction boxes not being reused. Seal or cap all existing conduit penetrations not being reused.

END OF SECTION

SECTION 26 05 19

WIRE

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Wire.
 - 2. Wiring connections and terminations.
 - 3. Terminal blocks and accessories.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 QUALITY ASSURANCE

- A. Manufacturers of Wire: Firms regularly engaged in the manufacture of electrical wire products of the types and ratings needed whose products have been in satisfactory use in similar service for not less than 5 years.
- B. Installer: A firm with at least 5 years of successful installation experience on projects with electrical wiring installation work similar to that in this project.
- C. Code Compliance: Comply with National Electrical Code (NFPA 70) and any and all local codes as applicable to construction and installation of electrical wiring devices, material, and equipment herein specified.
- D. UL Labels: Provide electrical material, which has been listed and labeled by Underwriters Laboratories.
- E. NECA Standard: Comply with applicable portions of National Electrical Contractor's Association's "Standard of Installation."

1.03 SUBMITTALS

- A. Submit shop drawings and product data under the provisions of Section 01 33 00—Submittals.
- B. Submit shop drawings for wiring system including layout of distribution devices, branch circuit conduit and cables, circuiting arrangement, and outlet devices.
- C. Submit manufacturer's instructions.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Provide factory-wrapped, waterproof, flexible-barrier material for covering wire on wood reels, where applicable, and weather-resistant fiberboard containers for factory-packaging

of wire, connectors, outlets, boxes, lamps, fuses, etc., to protect against physical damage in transit. Do not install damaged wire or other material; remove from project site.

- B. Store wire and other material in factory-installed coverings in a clean, dry, indoor space which provides protection against the weather.

PART 2–PRODUCTS

2.01 WIRE

- A. All wire for permanent installation shall be new stranded copper delivered to project in unopened cartons or reels, except where specifically noted and be UL listed for the use intended. No wire smaller than 12 AWG shall be used unless specifically noted. The use of multiconductor cable is not allowed.
- B. All wiring within control panels, supervisory control centers, and motor control centers that does not extend outside of the enclosure or the motor control center bucket shall be insulation-type MTW, minimum size 16 AWG.
- C. Wiring in dry locations shall be THHN. Wiring in damp and wet locations shall be XHHW-2.
- D. Refer to Section 26 05 53–Electrical Identification for required wire insulation color coding and conductor labeling requirements. Initial phase color shall be used throughout the run, even for switch legs. Colors must meet code requirements for each class voltage. Do not duplicate colors, including neutral, on different voltages.

2.02 WIRING CONNECTIONS AND TERMINATIONS

- A. Provide crimp type UL or ETL listed terminations for 6 AWG and smaller stranded conductor connections to electrical devices and equipment such as receptacles, switches, and terminal strips. Crimp devices shall be Sta-kon, or equal.
- B. Provide insulated, silicone-filled spring wire connectors with plastic caps for 8 AWG conductors and smaller. Connectors shall be King Silicone-Filled Safety Connectors, or equal. Spring wire connectors shall only be allowed in junction, outlet, or switch boxes. Spring wire connectors are not allowed for terminating motor conductors.
- C. No splices will be allowed unless reviewed by ENGINEER.

2.03 TERMINAL BLOCKS AND ACCESSORIES

- A. Terminal Blocks: ANSI/NEMA ICS 4: UL listed or UL recognized under UL 467, UL 486E, UL1059, and UL 1953 (power terminals only).
- B. Signal and Control Terminal Blocks:
 - 1. General-Purpose Terminal Blocks:
 - a. Terminal blocks shall be rated up to 600 volts AC/DC.
 - b. Terminal blocks shall accept center-mounted jumper bars without increasing the installed space.
 - c. Terminal blocks shall be Allen-Bradley Bulletin 1492-J, or equal.

- d. Terminal block color shall be gray.
- 2. Grounding Terminal Blocks:
 - a. Terminal blocks shall be Allen-Bradley Bulletin 1492-JG, or equal.
 - b. Terminal block color shall be green/yellow.
- 3. Disconnect-type Terminal Blocks (300-Volt Class):
 - a. Terminal blocks shall be feed-through type with a knife-blade disconnect.
 - b. Terminal blocks shall be Allen-Bradley Bulletin 1492-JKD, or equal, depending on the application.
 - c. Terminal block color shall be gray.
- 4. Fuse-type Terminal Blocks with Indicator (300-Volt Class):
 - a. Terminal blocks for applications from 100 to 300 volts AC shall be Allen-Bradley Bulletin 1492-H4, or equal, with neon blown-fuse indicator.
 - b. Terminal blocks for applications from 10 to 50 volts AC/DC shall be Allen-Bradley Bulletin 1492-H5, or equal, with LED blown-fuse indicator.
 - c. Terminal block color shall be black.
- 5. Terminal blocks shall have self-locking screw compression clamps rated for the size of conductors being terminated and upstream overcurrent protection for each application.
- 6. The same manufacturer and style of terminal block shall be used throughout the entire project for all applications.
- 7. Terminal blocks shall have tin-plated copper current bars and tin-plated steel screws. Terminal housings shall be completely finger safe from all live circuits and be constructed of self-extinguishing material with minimum UL 94-V0 flammability rating.
- 8. Terminal blocks shall accept pre-printed, snap-in labeling cards on both sides without increasing the installed space. Provide terminal block manufacturer's end barriers and screw-type retainers for all terminal block groupings.
- 9. Terminal blocks shall mount on standard DIN rail and shall be able to be removed without removing adjacent terminal blocks.
- 10. Multi-level terminal blocks and stacked, single-level terminal block installations are not acceptable.

C. Refer to Section 26 05 53—Electrical Identification for terminal block labeling requirements.

PART 3—EXECUTION

3.01 GENERAL WIRING METHODS

- A. Install electrical wire and connectors in accordance with the manufacturer's written instructions, applicable requirements of the NEC, the National Electrical Contractors Association's "Standard of Installation," and in accordance with recognized industry practices so that products serve the intended functions. Use appropriate wiring methods and materials for the equipment or environment.
- B. Stranded conductors shall be terminated using crimp-type devices specified herein. Conductors may not be wrapped around a terminal screw.
- C. Place an equal number of conductors for each phase of a circuit in the same raceway.
- D. Torque conductor connections and terminations with calibrated torque wrench to manufacturer's recommended values. Provide permanent marking on lug, bolt, nut, or connection for conductors larger than 4 AWG.

- E. Splice only in junction or outlet boxes. Splicing is not allowed in disconnects, motor control centers, panelboards, control panels, equipment, etc. Avoid splices between terminals of interconnecting power and control wiring.
- F. Spring wire connectors shall only be used in junction, outlet, or switch boxes. Equipment wireways (e.g., motor control centers, panelboards, disconnects, etc.), and control panels shall not have any spring-wire connectors installed; all terminations shall be on terminal strips.
- G. Neatly train, lace, and tie wrap all wiring inside boxes, equipment, control panels, MCCs, and panelboards.
- H. Make conductor lengths for parallel circuits equal.
- I. The same color shall be used for each numbered wire throughout its entire length.
- J. Terminate all wiring on terminal blocks in control panels, VFD enclosures, starter cubicles, and similar equipment. This shall include all spare or unused wires.
- K. Provide a dedicated neutral for each branch circuit or feeder requiring a neutral. Ampacity of neutral conductor shall match that of the branch circuit or feeder.
- L. Do not use a pulling means that can damage the raceway.
- M. Signal wiring (below 100 volts) must be in a conduit separate from power and/or control wiring (over 100 volts). Signal wire shall include, but not be limited to, loop-powered devices and communication wiring (i.e., Ethernet, serial, etc.). Analog wiring shall be in a conduit separate from all other wiring.
- N. Provide junction or pull boxes to facilitate the “pulling in” of wires or to make necessary connections. All raceways and apparatus shall be thoroughly blown out and cleaned of foreign matter prior to pulling in wires.
- O. Thoroughly clean wires before installing lugs and connectors.
- P. Make splices, taps, and terminations to carry full capacity of conductors without perceptible temperature rise.
- Q. Terminate spare conductors within equipment, MCCs, control panels, etc., on terminal strips and label as “SPARE.” Spare wiring in pull or junction boxes may be terminated with electrical tape and labeled as “SPARE.” All spare conductor labels shall indicate where the conductors terminate. Refer to Section 26 05 53—Electrical Identification, for additional requirements.

3.02 GENERAL LOW-VOLTAGE WIRING METHODS (LESS THAN 100 VOLTS)

- A. Low-voltage wiring installation requirements specified herein shall be applicable to all systems installed that utilize low-voltage wiring where such wiring installation is not specified in other technical sections.

- B. Low-voltage wiring shall be installed in conduit.
- C. Do not use wire smaller than 14 AWG for control wiring greater than 60 volts, or 18 AWG for voltages less than 60 volts. All sizes subject to NEC 725 requirements.
- D. Low-voltage cable splices shall only be allowed in junction boxes.

3.03 WIRING INSTALLATION IN RACEWAYS

- A. Pull all conductors into a raceway at the same time. Use UL-listed wire-pulling lubricant for pulling 4 AWG and larger wires. Wax-based pulling lubricant is not allowed unless it includes a Teflon additive.
- B. Install wire in raceway after interior of building is enclosed, watertight, and dry, and all mechanical work likely to injure conductors has been completed.
- C. Completely and thoroughly swab raceway system before installing conductors.
- D. Conductors No. 6 AWG and larger shall be pulled into conduits by hand or by utilizing a tugger with built-in tension meter. Other motorized machines of any type are not allowed for any wire pulling. CONTRACTOR shall provide a report to ENGINEER for each pull indicating maximum tension reached during the pull along with manufacturer's maximum pulling tension.
- E. Conductors shall be installed in conduit system in such a manner that insulation is not damaged, conductors are not overstressed in pulling, and walls are not damaged. No splices are permitted except in junction boxes or outlet boxes.
- F. CONTRACTOR shall observe code limitation on the number and size of wires in an outlet box. CONTRACTOR shall either lay out work so that the wires do not exceed the particular box limitation or provide larger boxes approved for additional capacity.
- G. Circuiting is indicated diagrammatically on the Drawings.

3.04 TERMINAL BLOCK INSTALLATION

- A. A maximum of one conductor shall be installed on the field-wired side of each terminal block. If rated to accept more than one conductor, a maximum of two conductors shall be installed on the enclosure-wired side of each terminal block. Provide additional terminal blocks and shorting jumpers as required.
- B. Provide a separate ground-type terminal block for each shielded-cable drain conductor.
- C. Provide ten percent spare terminal blocks for each type of connected terminal block, minimum five spare terminal blocks total. For each grouping of terminal blocks, provide 25% spare DIN rail space.
- D. Maintain a minimum of 1 1/2 inches between terminal blocks and adjacent devices and enclosure wireways.

3.05 FIELD QUALITY CONTROL

- A. Inspect wire for physical damage and proper connection.
- B. Prior to energizing, check conduit, raceways, outlet boxes, and wire for continuity of circuitry and for short circuits. Correct malfunction when detected.
- C. Subsequent to wire hookups, energize circuitry and demonstrate functionality in accordance with these specifications.
- D. Perform continuity test on all power and equipment branch circuit conductors. Verify proper phasing connections.
- E. Perform field inspection and testing according to provisions of this section.

3.06 ACCEPTANCE TESTS

- A. CONTRACTOR shall furnish all materials, labor, and equipment necessary for the acceptance tests specified herein. Acceptance tests shall be performed in the presence of OWNER or OWNER's representative and must be passed before final acceptance of the work.
- B. CONTRACTOR shall be responsible for powered tests of each field-installed device unless specifically noted otherwise. CONTRACTOR shall be responsible for device operation as powered from its power source and signals as received at the I/O modules.
- C. Operation Test: By operational testing, OWNER will give final acceptance of the wiring system when all of the wiring is considered a complete system. All equipment shall function and operate in the proper manner as indicated in the details of the specifications and on the Drawings. All motors shall be properly connected to protective devices, and motor rotation shall be in the correct direction.

3.07 WIRE INSTALLATION SCHEDULE

- A. Install all wiring in raceways except as otherwise noted. This includes all low-voltage wiring such as temperature control, instruments, phone, network, fiber optic, etc.

END OF SECTION

SECTION 26 05 23

INSTRUMENT AND COMMUNICATION WIRE AND CABLE

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: This specification contains the requirements for instrument wire and cable as opposed to electrical power wire and cable.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 QUALITY ASSURANCE

- A. Standards: Comply with standards specified in this section as listed in Division 01.
- B. Qualifications of Installers: Workers who are thoroughly trained and experienced in the necessary crafts, and who are completely familiar with the specified requirements and the methods needed for proper performance of the work.

1.03 PRODUCT HANDLING

- A. Instrument cable shall be furnished in lengths as necessary.
- B. Reels, coils, or package rolls of instrument cable shall be identified with the project name and other tagging identification as called for.

1.04 SUBMITTALS

- A. Submit shop drawings and product data in accordance with provisions of Section 01 33 00—Submittals.

1.05 QUALIFICATIONS

- A. CONTRACTOR shall have at least 10 years of experience in the installation of similar systems. CONTRACTOR shall provide documentation upon request to certify that all assigned staff have attended training courses corresponding to the type of cabling and equipment specified herein.
- B. CONTRACTOR shall currently be licensed to install low voltage electronic cabling systems in the state of the project.
- C. CONTRACTOR shall currently meet all manufacturer's requirements for the provision and installation of all equipment specified herein.

PART 2-PRODUCTS

2.01 SHIELDED PAIR CABLING FOR ELECTRONIC INSTRUMENTS

- A. Shielded pair cabling shall have stranded, tinned-copper conductors, No. 16 AWG, twisted with 2-inch lay.
- B. Insulation of conductors shall be 15 mil, 90°C minimum PVC, rated for 300 volts. Materials shall equal or exceed UL 13 requirements for physical properties.
- C. Color coding shall be manufacturer's standard or as stated.
- D. The outer jacket shall be flame-retardant and weather- and ultraviolet-resistant PVC, 35 mils thick, and 80°C minimum rating. The outer jacket shall contain a ripcord and shall equal or exceed the requirements of UL 1277. Cable shall be UL labeled as power-limited circuit cable.
- E. A 100% coverage shield shall be applied over the insulated conductors. The shield shall consist of a 0.85 mil minimum thickness aluminum mylar tape. A stranded, tinned-copper drain wire shall be furnished in continuous electrical contact with the shield.
- F. Single-pair shielded cables shall be Belden 9316, or equal.

2.02 HEAT SHRINK TUBING FOR SHIELDED INSTRUMENT CABLES

- A. Heat shrink tubing for sealing the ends of all shielded instrument, cables shall be heavy-wall, low-voltage tubing as manufactured by Raychem Type WCSM, or equal.

2.03 INDUSTRIAL ETHERNET CABLE

- A. 300-Volt Rated Unshielded Cable:
 - 1. For communication with plant SCADA Systems and equipment in communication racks, supervisory control centers, and control panels without VFDs, etc., under 300 volts, and other areas or raceways with power wiring under 300 volts, provide 300-volt safety voltage rated, 80-volt operating voltage rated, 4-pair, unshielded (U/UTP), twisted-pair cables. Transmission characteristics of the cables shall meet full Category 6 performance criteria as defined by the ANSI/TIA-568-C.2 standard.
 - 2. Industrial Ethernet cable shall be minimum 23 AWG with PVC jacket. The cable outer jacket shall be industrial-grade PVC with a maximum overall cable diameter of 0.24 inch. Cable shall be CMR rated, UL listed, and shall be Systimax Solutions 1071E, or equal.
 - 3. Cable jacket color shall be light blue.
 - 4. Provide unshielded RJ45 connectors on both ends of each cable.
- B. Patch cables shall be provided premanufactured by the cable manufacturer or connector manufacturer in sufficient length to connect the associated equipment to any port on the equipment, patch panel, or switch. Field-attached plugs shall be insulation displacement type and shall be by the same manufacturer as the cable.

PART 3-EXECUTION

3.01 INSTALLATION REQUIREMENTS AND SPECIAL CONSIDERATIONS

- A. Shielded pair and industrial Ethernet cabling specified in this section shall be installed in conduit, and may not be run free-air or in nonmetallic tubing such as innerduct.

3.02 GROUNDING

- A. Shielded cabling shall be installed in accordance with manufacturer's instructions and to minimize electrical noise and interference to associated instruments. Refer to instrument manufacturer's instructions for additional requirements.
- B. Ends of signal wires shall be sealed to prevent the migration of moisture into the cable and to prevent unintentional grounding of the shield at the open end. Seal signal wires using a minimum 1-inch piece of heat-shrink tubing installed over PVC jacket and individual wires, and heat-shrink to a watertight fit.
- C. All shields must be grounded.
- D. Shields shall be grounded at one point only. Shielded cabling shall be isolated and left open at the instrument.
- E. Cable shield grounds shall be isolated from control system signal grounds, except at instrument system grounding electrodes.

END OF SECTION

SECTION 26 05 29
SUPPORTING DEVICES

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Conduit and equipment support members.
 - 2. Fastening hardware.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 QUALITY ASSURANCE

- A. Support systems shall be adequate for weight of equipment and conduit, including wiring, which they carry.

1.03 SUBMITTALS

- A. Submit shop drawings and product data in accordance with provisions of Section 01 33 00–Submittals.

PART 2–PRODUCTS

2.01 MATERIAL

- A. Support Members:
 - 1. 316 stainless steel in exterior locations and damp and wet locations.
 - 2. Hot-dipped galvanized steel in all other areas.
- B. Hardware:
 - 1. Stainless steel in exterior locations and damp and wet locations.
 - 2. PVC-coated steel clamps and stainless steel hardware with stainless steel members where used to support PVC-coated rigid steel conduits.
 - 3. Hot-dipped galvanized steel in all other areas.
- C. Manufacturers: Unistrut P-1000, B-line, Superstrut, or equal.

PART 3–EXECUTION

3.01 INSTALLATION

- A. All supporting devices and support structures shall be constructed such that the structure adequately supports the load of the equipment installed on it including any wind and/or snow loads. Provide additional support members to those shown on the Drawings to adequately support load.

- B. Fasten hanger rods, conduit clamps, and outlet and junction boxes to building structure using expansion anchors or support members. Do not use spring steel clips and clamps. Provide standoffs or suspended ceiling grid bridge supports as specified in other technical sections.
- C. Use toggle bolts or hollow wall fasteners in hollow masonry, plaster, or gypsum board partitions and walls; expansion anchors or preset inserts in solid masonry walls; self-drilling anchors or expansion anchors on concrete surfaces; sheet metal screws in sheet metal studs; and wood screws in wood construction.
- D. The ends of all support members shall be ground smooth.
- E. Do not fasten supports to piping, ductwork, mechanical equipment, or conduit.
- F. Do not use powder-actuated anchors.
- G. Do not drill structural steel members.
- H. Fabricate supports with welded end caps and all welds and surfaces ground smooth for neat appearance. Use hexagon head bolts with steel spring-lock washers under all nuts.
- I. Install surface-mounted cabinets and panelboards with a minimum of four anchors.
- J. Do not use chain, wire rope, or perforated strap hangers.
- K. All welds shall be continuous and ground smooth.

END OF SECTION

SECTION 26 05 33

CONDUIT

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Rigid aluminum conduit and fittings.
 - 2. PVC externally and internally coated galvanized rigid metal conduit and fittings.
 - 3. Liquidtight flexible metal conduit and fittings.
 - 4. Conduit seals and special fittings.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 REFERENCES

- A. ANSI C80.5—Electrical Rigid Aluminum Conduit (ERAC).
- B. ANSI/NEMA FB 1—Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable.
- C. NEMA RN 1—Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal.

1.03 QUALITY ASSURANCE

- A. Manufacturers of Raceways: Firms regularly engaged in the manufacture of electrical raceways of the types and capacities required whose products have been in satisfactory use in similar service for not less than 5 years.
- B. Installer: A firm with at least 5 years of successful installation experience on projects with electrical wiring installation work similar to that for the project.
- C. Code Compliance: Comply with National Electrical Code (NFPA 70) and any and all local codes as applicable to construction and installation of electrical wiring devices, material, and equipment herein specified.
- D. UL Labels: Provide electrical materials, which have been listed and labeled by Underwriters Laboratories.
- E. Prior to shipment to the site, all conduit provided shall be new, unused material, and shall not have been stored outdoors or exposed to weather.
- F. NECA Standard: Comply with applicable portions of National Electrical Contractor's Association's "Standard of Installation."

1.04 SUBMITTALS

- A. Submit shop drawings and product data in accordance with provisions of Section 01 33 00–Submittals.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Provide color-coded thread protectors on the exposed threads of threaded rigid metal conduit.
- B. Handle conduit carefully to prevent end damage and to avoid scoring the finish.
- C. Store conduit inside and protect from weather. When necessary to store outdoors, elevate well above grade and enclose with durable, waterproof wrapping.

PART 2–PRODUCTS

2.01 RIGID METAL CONDUIT AND FITTINGS

- A. Rigid Aluminum Conduit: ANSI C80.5 and UL6A. Heavy wall.
- B. Conduit bodies for rigid aluminum conduit shall be as manufactured by Appleton, Form 85, or equal, and be constructed of pressure-cast, copper-free aluminum for sizes 2 inches and under, and sand-cast, copper-free aluminum for sizes over 2 inches. Conduit bodies shall have domed gasketed covers, and stainless steel screws. Covers for conduit bodies must have bolts that thread into the conduit body. Snaptight and wedgenut covers are not allowed. CONTRACTOR shall select body style and size per application.
- C. PVC-coated conduit and fittings shall be internally and externally hot dipped galvanized rigid metal conduit with hot dipped galvanized threads and PVC coating. PVC coating shall be UL listed with rigid metal conduit as the primary means of corrosion protection for the conduit, and PVC coating shall have an external 40 mil thickness with an internal 2 mil urethane coating. Acceptable manufacturers shall be Plasti-bond RedH₂OT by Robroy Industries, Ocal-Blue by ABB (Thomas & Betts), Calbond, or equal. All installers shall be field-certified from the factory for installation and shall provide proof of certification. PVC-coated conduit and fittings shall meet the following listings and manufacturing standards, without exception:
 - 1. ANSI C80.1.
 - 2. UL6.
 - 3. NEMA RN1.
- D. Conduit bodies for PVC-coated rigid conduit shall be as manufactured by Plasti-bond RedH₂OT by Robroy Industries, Ocal-Blue by ABB (Thomas & Betts), Calbond, or equal, and have a 40 mil PVC exterior coating and 2 mil red urethane interior coating. Conduit bodies shall be Form 8 style or pulling elbow and include domed, gasketed covers and stainless steel screws. Covers for conduit bodies must have bolts that thread into the conduit body. Snaptight and wedgenut covers are not allowed. CONTRACTOR shall select body style and size according to application.

- E. Fittings and Conduit Bodies: ANSI/NEMA FB 1 and UL 514B; threaded-type material to match conduit. For hazardous locations, fittings and conduit bodies shall meet the requirements of UL 886. Split couplings are not allowed.
- F. Supports: One-hole straps with conduit clamps and backspacers shall be used for surface-mounted conduit. Where standoffs are required, provide conduit clamps and supporting devices as specified in Section 26 05 29—Supporting Devices. One-hole straps with conduit clamps and backspacers for PVC-coated rigid steel conduit shall be PVC-coated rigid steel material.

2.02 LIQUIDTIGHT FLEXIBLE CONDUIT AND FITTINGS

- A. Liquidtight Flexible Metal Conduit:
 - 1. Conduit: Spiral-wound, electrogalvanized, single-strip steel with integral grounding conductor continuously enclosed within the entire length of the convolutions. The flexible PVC jacket shall be sunlight-resistant, flame-retardant, and resistant to damage from mild acids. Conduit shall be UL Listed and be rated for installation in Class I, Division 2, Groups C and D locations. Conduit shall be Liquatite Type LA, or equal.
 - 2. Fittings: UL listed with thermoplastic elastomer sealing gasket.
 - a. Provide stainless-steel fittings in exterior and damp and wet locations, unless noted otherwise.
 - b. Provide electro-zinc plated steel fittings in all other areas, unless noted otherwise.

2.03 CONDUIT SEALS AND SPECIAL FITTINGS

- A. Conduit Seals: Duct sealing compound, OZ Gedney Type DUX, or equal.
- B. Expansion Fittings: Crouse Hinds or Robroy Type XJG (non-hazardous location) or Type UNY/UNF (hazardous location), or equal, for aluminum or PVC-coated rigid conduit.
- C. Expansion Deflection Fittings: O-Z type "DX," Crouse Hinds or Appleton.
- D. Ground Bushings: Crouse Hinds Model GLL, or equal.
- E. Mechanical Seals: 316 stainless steel, Link Seal, or equal. Link seals shall be provided with 316 stainless steel bolts, nuts, and fasteners.
- F. Watertight Hubs: Diecast, insulated and gasketed, rated for wet or dry locations indoors or outdoors. Watertight hubs shall be Appleton HUBXXXDN, Crouse-Hinds Myers Hubs, or equal.
- G. Conduit Plugs: Kwik N Sure pipe plug as manufactured by Cherne Industries, or equal. Plug shall include natural rubber O-ring with galvanized wing nut and hex nut.
- H. Conduit Threads Joint Compound: Kopr-shield conductive, anti-corrosion joint compound as manufactured by Thomas & Betts, or equal.

PART 3-EXECUTION

3.01 CONDUIT SIZING, ARRANGEMENT, AND SUPPORT

- A. Size conduits for branch circuit conductors, control wires, and instrumentation cables so as to have not less than 25% spare capacity after installation; 3/4 inch minimum size. Minimum size for flexible metal conduit is 1/2 inch.
- B. Maintain at least 1 inch of separation between conduit sizes to 1 1/2 inches and 2 inches between conduits 1 1/2 inches or larger. Maintain 1 foot of separation between signal conduits (below 100 volts) and power conduits (100 volts and above).
- C. All conduit shall be supported in accordance with the NEC and as specified herein. This shall apply to all conduit types, including flexible conduit.
- D. Provide for the proper application, installation, and location of inserts, supports, and anchor bolts for a satisfactory raceway system. Where any component of the raceway system is damaged, replace or provide new raceway system.
- E. Run conduits to avoid adverse conditions such as heat and moisture, to permit drainage, and to avoid all materials and equipment of other trades. Maintain a minimum clearance of 6 inches from all hot water pipes, flues, or any high-temperature piping or ductwork.
- F. Conduits shall be attached to building surfaces and not suspended unless installed in a Unistrut-type conduit rack as specified herein. Individual conduits shall not be suspended. Clevis hangers are not allowed.
- G. Independently support or attach the raceway system to structural parts of construction in accordance with good industry practice. Conduits through roofs shall be rigid metal conduit and be equipped with pitch pockets.
- H. Conduit attached to building surfaces that may be damp or wet shall be spaced out to avoid rust and/or corrosion using fittings approved for the use. Use back straps on all conduit in damp and wet locations, or mount conduit with Unistrut straps, or equal. Watertight hubs shall be used in all damp and wet locations.
- I. Conduits shall be securely fastened to building structure at intervals not exceeding 8 feet or closer, if necessary. Where hangers are necessary, 3/8-inch rod/eyelets/rings/or trapeze type in Unistrut channel and pipe clamps shall be used. Wire or perforated strap iron is not acceptable.
- J. Vertical conduit runs 1 1/4 inches and larger passing through floors shall be supported at each floor with conduit riser grips.

3.02 GENERAL CONDUIT INSTALLATION REQUIREMENTS

- A. Run exposed conduit grouped and parallel or perpendicular to construction. Do not route exposed conduits over boilers or other high-temperature machinery nor in contact with such equipment. All conduit shall be run exposed in structures below grade.

- B. Ream conduit smooth at ends, cap upon installation, rigidly attach to structural parts of the building, and securely fasten to all cabinets, junction boxes, pull boxes, splicing chambers, disconnect switches, and all other components of the raceway system.
- C. Provide all empty raceways 2 1/2 inches and over with No. 10 galvanized fishwire, and nylon cord for conduits smaller than 2 1/2 inches. Empty raceways and fishwire/nylon cord shall be identified with permanent label, and label shall include conduit termination point. All empty conduits shall be threaded, capped and flush with finished floor or wall. Exposed conduits shall be threaded and capped.
- D. Provide conduit raceway for exposed cables that are not UV resistant. This shall include, but not be limited to, instrument wiring, motor terminators, pump cables, float cables, etc.
- E. Conduit seals shall be provided where conduits pass from the interior to exterior of the building, where conduits enter a room which at any time is a low or high temperature room, where conduits enter a room which at any time is subject to internal air pressures above or below normal, and any conduit entering a wet location.
- F. Liquidtight flexible conduit shall be installed in such a manner that liquids tend to run off the surfaces and not drain toward the fittings.
- G. All runs of flexible conduit and flexible conduit couplings to equipment and devices shall be as short as practicable, of the same size as the conduit it extends, and with enough slack to reduce the effects of vibration to a minimum.
- H. Provide conduit expansion-deflection fittings as specified herein in all conduit runs where movement perpendicular to axis of conduit may be encountered.
- I. The PVC-coated rigid conduit manufacturer's touch-up compound shall be used on all conduit interior and exterior bare steel exposed because of nicks, cuts, abrasions, thread cutting, and reaming; minimum six coats.
- J. Routing of conduits on exterior of buildings shall be avoided to the extent possible and shall not cover or interfere with lighting, signage, windows, louvers, or other openings. All conduit routing on exterior walls shall be reviewed with ENGINEER for approval prior to installation.
- K. Conduits installed in damp and wet locations shall have all threads coated with conduit threads joint compound.

3.03 CONDUIT PENETRATIONS AND TERMINATIONS

- A. Where fittings are brought into an enclosure with a knockout, a gasket assembly consisting of an O-ring and retainer shall be installed on the outside. Fittings shall be insulated throat type.
- B. Conduit penetrations for control panels or enclosures containing electronic equipment shall utilize watertight hubs and, if entering the top of the enclosure, shall be located at the front of the enclosure and not over any electronic equipment (e.g., PLC, power supplies, etc.).

- C. Conduit penetrations for all exterior enclosures (e.g., disconnects, junction boxes, control panels) shall utilize watertight hubs and enter the sides or bottom of the enclosure. Conduits shall not penetrate the top of the enclosure.
- D. Provide conduit expansion fittings as specified herein in all conduit runs that cross a structural expansion joint.
- E. Where above-grade conduits pass through cores in existing structures or through masonry walls, grout openings between conduit and walls or floors with sand cement mortar.

3.04 CONDUIT INSTALLATION SCHEDULE

- A. The following schedule lists specific conduit types allowed in designated areas. Those areas not listed under a specific conduit type shall not have that type of conduit installed:
 - 1. Rigid aluminum: All interior locations.
 - 2. PVC-coated rigid steel: Interior and exterior locations requiring mechanical protection.
 - 3. Liquidtight flexible metal conduit not over 3 feet in length for final connections to:
 - a. Equipment with sliding bases or flexible positioning.
 - b. Equipment with vibration isolation mounting.

END OF SECTION

SECTION 26 05 35

BOXES

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Small junction boxes.
 - 2. Pull and junction boxes.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern Work in this section.

1.02 REFERENCES

- A. ANSI/NEMA OS 1—Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
- B. ANSI/NEMA OS 2—Nonmetallic Outlet Boxes, Device Boxes, Covers, and Box Supports.
- C. NEMA 250—Enclosures for Electrical Equipment (1000 Volts Maximum).

1.03 QUALITY ASSURANCE

- A. Manufacturers of switches, outlets, boxes, lamps, fuses, lugs, etc.: Firms regularly engaged in the manufacture of these products, of the types and ratings required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. Installer: A firm with at least 5 years of successful installation experience on projects with electrical wiring installation Work similar to that in this project.
- C. Code Compliance: Comply with National Electrical Code (NFPA 70) and any and all local codes as applicable to construction and installation of electrical wiring devices, material, and equipment herein specified.
- D. UL Labels: Provide electrical cable, boxes, raceways, wire, connectors, outlets, switches, etc. that have been listed and labeled by Underwriters Laboratories.
- E. NECA Standard: Comply with applicable portions of National Electrical Contractor's Association's "Standard of Installation."

1.04 SUBMITTALS

- A. Submit shop drawings and product data in accordance with provisions of Section 01 33 00—Submittals.

PART 2-PRODUCTS

2.01 SMALL JUNCTION BOXES

- A. Cast Boxes: Aluminum or cast ferrous alloy, deep-type, gasketed cover, threaded hubs, Eaton FD Series, or equal.
- B. PVC-Coated Cast Boxes: Boxes shall be deep type and be by the same manufacturer as the conduit.
- C. Covers for junction boxes shall have covers that match box type.

2.02 PULL AND JUNCTION BOXES

- A. Cast Boxes: NEMA 250; Type 4, surface-mounted junction box, UL-listed as watertight. Cast aluminum or ferrous alloy box and cover with ground flange, neoprene gasket, and stainless steel cover screws, Crouse-Hinds WCB Series, or equal. Boxes larger than 12 inches in any dimension shall have hinged cover.
- B. PVC-Coated Cast Boxes: Provide PVC-coated cast boxes in areas where PVC-coated conduit is used. Boxes shall be by the same manufacturer as the conduit. Boxes larger than 12 inches in any dimension shall have hinged cover.
- C. NEMA 12 Boxes: Painted steel with hinged cover, recessed quarter-turn latches, and gasket. Boxes shall be Hoffman CSD, or equal.
- D. Where terminal blocks or other devices are mounted in a pull or junction box, provide a 14-gauge steel back panel with a white enamel finish for mounting.
- E. All enclosures with double doors or that are free-standing shall have a three-point latch.
- F. Boxes specified in this section are not allowed to have knockouts and are not allowed to be used as enclosures for control panels.

PART 3-EXECUTION

3.01 COORDINATION OF BOX LOCATIONS

- A. Provide electrical boxes as necessary for splices, taps, wire pulling, cable bending radii, equipment connections, and code compliance.
- B. Where dedicated raceways are provided for different voltage systems or wiring, (e.g., motor power wiring and motor space heaters), separate boxes shall also be provided unless acceptable to ENGINEER. Where acceptable to ENGINEER, combined boxes shall be physically divided to separate the wiring.
- C. Locate and install boxes to allow access. Where installation is inaccessible, coordinate locations and sizes of access doors.
- D. Locate and install to maintain headroom and to present a neat appearance.

- E. All boxes attached to building surfaces that may be damp or wet shall be spaced to avoid rust and/or corrosion. All boxes in damp and wet locations shall be on 1/2-inch standoffs.

3.02 SMALL JUNCTION BOX INSTALLATION

- A. Provide knockout closures for unused openings.
- B. Support boxes independently of conduit.
- C. Use multiple gang boxes where more than one device is mounted together; do not use sectional boxes. Provide barriers to separate wiring of different voltage systems.
- D. Boxes provided for branch circuits and feeders shall not contain control wiring. Control wiring shall have dedicated pull and junction boxes provided. Wiring for different voltage systems (e.g., 24 V, 120 V, 480 V) shall have dedicated pull and junction boxes for each voltage.
- E. All interior exposed wall and ceiling outlet boxes shall be cast boxes, unless otherwise noted.
- F. Knockout punches or saws shall be used for holes; boxes with prepunched holes are not acceptable.
- G. Cast boxes with 3/4-inch hubs and aluminum fittings and enclosures may be used with all conduit types.
- H. Provide PVC-coated cast boxes in all areas where PVC-coated conduit is used. Boxes shall be by the same manufacturer as the PVC-coated conduit.

3.03 PULL AND JUNCTION BOX INSTALLATION

- A. Support pull and junction boxes independent of conduit.
- B. Knockout punches or saws shall be used for holes; boxes with prepunched holes are not acceptable.
- C. Refer to Section 26 05 53—Electrical Identification for junction box labeling requirements.
- D. All interior exposed junction and pull boxes shall be NEMA 12, unless noted otherwise.
- E. All exterior junction and pull boxes shall be NEMA 4X. Boxes in areas subject to damage shall be stainless steel.

END OF SECTION

SECTION 26 05 53
ELECTRICAL IDENTIFICATION

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Nameplates.
 - 2. Wire and cable markers.
- B. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.

1.02 SUBMITTALS

- A. Submit shop drawings and product data in accordance with provisions of Section 01 33 00—Submittals.
- B. Provide schedule for nameplates and labeling tags with shop drawings. Reference Drawings for type used.

PART 2—PRODUCTS

2.01 NAMEPLATES

- A. Nameplate material shall be multi-color, two-layer, nonconductive engraving plastic suitable for permanent installations in indoor and outdoor locations. The material shall be UV-resistant and suitable for installation in direct sunlight.
- B. Type "A":
 - 1. Use:
 - a. Each device on control panel exterior.
 - b. Cabinets, enclosures, pull, and junction boxes.
 - 2. Size: As required.
 - 3. Background Color: Black.
 - 4. Character Color: White.
 - 5. Character Size: 1/2-inch.
 - 6. Engraving: As requested by ENGINEER. Label shall include equipment number and description (i.e., SCAL-60-01, Fluoride Scale).
 - 7. Mounting Location: Front exterior.
- C. Type "B":
 - 1. Use: Supervisory Control Centers and Control Panels.
 - 2. Size: 4 inches by 4 inches.
 - 3. Background Color: Black.
 - 4. Character Color: White.
 - 5. Character Size: 2 1/4 inches.

6. Engraving: Label shall include equipment number and description (i.e., LP-10-01, First Floor Power Panel).
7. Mounting Location: Enclosure front at top.

2.02 WIRE AND CABLE MARKERS

- A. Wire and cable markers shall be permanently-attached, heat-shrink type labels.
 1. Sleeve: Permanent, PVC, white, with legible machine-printed black markings.
 2. Acceptable Manufacturers: Raychem Model D-SCE or ZH-SCE, Brady Model 3PS, or equal.
 3. Grounding Conductor: Provide green wire marker; minimum 2 inches wide.
- B. Wire or cable numbering preprinted on the conductor or cable insulation, flag-type labels, and individual wraparound numbers (such as Brady preprinted markers) are not acceptable. All wire markers shall be the same throughout the project.

PART 3–EXECUTION

3.01 INSTALLATION

- A. Degrease and clean surfaces to receive nameplates.
- B. Install nameplates parallel to equipment lines.
- C. Affix nameplates with weatherproof, UV-resistant adhesive in outdoor locations and sticky back adhesive in indoor locations.

3.02 WIRE IDENTIFICATION

- A. Provide wire markers on each conductor, including neutral and spare conductors, in panelboard gutters, pull boxes, outlet and junction boxes, and at load connection. Neutral conductor labels shall include the associated branch circuit number. Identify with branch circuit or feeder number for power and lighting circuits, and with control wire number as indicated on schematic and interconnection diagrams for control wiring. Spare conductors shall have control wire number or shall indicate termination point of wire.
- B. Conductors in pull boxes, motor control centers, supervisory control panels, control panels, cabinets, and panelboards shall be grouped as to circuits and arranged in a neat manner. All conductors of a feeder or branch circuit shall be grouped, bound together with nylon ties, and identified. Phase identification shall be consistent throughout the system. All wiring labels shall be able to be read without removing wire management (i.e., wiring trough covers, spiral windings, etc.) or twisting the wire/cable.
- C. Where terminal blocks are factory provided with non-project-specific labels by equipment manufacturers in MCC buckets, combination starters, VFDs, motor control panels, control panels, and similar equipment and are wired to terminal blocks in control panels with project-specific labels, the interconnecting wiring shall be labeled at both ends to match the project-specific terminal blocks in the control panel. Provide an additional label on the end of each wire that is connected to a terminal block with a non-project-specific label to indicate the associated terminal block.

- D. Power Conductor Insulation Color Code:
- 6 AWG and Larger: Provide general-purpose, flame-retardant, permanent tape at each termination and at accessible locations such as junction and pull boxes, panelboards, motor control centers, etc. Apply tape with at least six full, overlapping wraps; minimum 2 inches wide.
 - 8 AWG and Smaller: Provide conductors with color-coded insulation.
- E. Control Panel and Field-Installed Control Conductor Insulation Color Code:
- All conductors shall have color-coded insulation.
 - Colors:

System	Conductor	Color
Supply Voltage	Ungrounded Circuit Conductors Neutral	Black White
Discrete 120-volt AC Input/Output	Control Circuit Conductor Neutral	Red White
Discrete 12/24-volt DC Input/Output	Control Circuit Conductor Common	Blue White with Blue Stripe
Conductors energized when the main disconnect is in the "off" position (e.g., foreign supply voltages)	Control Circuit Conductor AC Neutral DC Common Ground	Orange White White with Blue Stripe Green

- F. Circuit Identification:
- Identify power, instrumentation, and control conductors at each termination and at accessible locations such as junction and pull boxes, panelboards, motor control centers, etc.
 - Conductors for panelboard circuits shall identify circuit matching the circuit directory designations, including the neutral conductor.
 - Control conductor identification shall match the associated terminal block label.
 - Circuits Not Listed in Circuit Directories:
 - Assign circuit name based on unique device or equipment at load end of circuit.
 - Where unique device or equipment names are not available or apparent, add a unique number or letter modifier to each otherwise identical circuit name.

3.03 DATA CABLE AND COMMUNICATION EQUIPMENT IDENTIFICATION

- A. Individual labels shall be placed on both ends of all cables.
- B. Each component shall be clearly labeled using a code identifying each device's location throughout the facility along with a unique identifier. The Record Drawings shall identify the numbering at each panel and device. Each media type shall be uniquely labeled. For cables,
- Label shall be: Control panel–equipment number.
 - All labels shall comply with ANSI/TIA/EIA-606-A-1.
- C. Refer to Section 26 05 23–Instrument and Communication Wire and Cable for cable insulation and jack color requirements.

3.04 JUNCTION BOX IDENTIFICATION

- A. All junction boxes shall be labeled with permanent nameplates. Nameplates shall indicate circuit or load served, as well as the power source and highest voltage present on any conductor.

3.05 CONDUIT FITTINGS IDENTIFICATION

- A. All conduit fittings that contain splices of any kind shall be labeled with permanent nameplates indicating "splice within." Nameplates shall be clearly visible at location installed. Nameplates shall be fastened to each conduit fitting with heavy duty, UV-resistant, cold weather cable ties.

3.06 TERMINAL BLOCK IDENTIFICATION

- A. Terminal blocks shall be labeled on both sides of each terminal block. Terminal block numbering shall match the numbers shown on the project-specific wiring diagrams.
- B. Fused terminal blocks labels shall be located on top of the terminal blocks and include the fuse voltage and ampere rating.

3.07 COMPONENT IDENTIFICATION

- A. All components (e.g., relays, timers, power supplies, transformers, etc.) within enclosures shall be identified with sticky-back adhesive, self-laminating, machine-printed marking labels. Labels shall be installed on the enclosure back panel and not on the device itself, wireway covers, or any other removable devices. Labels shall be included on the as-built drawings.

3.08 LABELING FONT REQUIREMENTS

- A. The font for all conductor, cable, and device labels shall be Arial with black characters on white background, and minimum font size 12.
- B. The text for all conductor, cable, and device labels shall be machine printed. Handwritten labels are not acceptable.

END OF SECTION

SECTION 26 09 00

CONTROLS AND INSTRUMENTATION

PART 1–GENERAL

1.01 SUMMARY

A. Related Sections and Divisions:

1. Applicable provisions of Division 01 shall govern work in this section.
2. Section 26 09 10–Controls and Instrumentation Drawings.
3. All other sections of Division 26.

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1.02 SYSTEM DESCRIPTION

- A. The work includes furnishing, delivering, installing all items furnished, and placing in operation additions to the Supervisory Control and Data Acquisition (SCADA) System for the North Wastewater Treatment Plant.
- B. System Supplier shall be defined as the fabricator, assembler, and supplier of all system components. This shall include, but not be limited to, all instrumentation as specified, all PLC cabinets and required interface hardware and internal wiring, hardware, system drawings, system software, and MCC modification drawings as necessary.
- C. ENGINEER will be responsible for development of the SCADA System computer HMI graphics.
- D. CONTRACTOR shall inspect all work. The Bid shall include everything necessary to obtain a complete installation operating in accordance with these specifications and the Bidder's proposal, whether necessary items and equipment are contained in, or are remote from the enclosures furnished under this Contract. All responsibility for this system ultimately lies with CONTRACTOR.
- E. CONTRACTOR shall be responsible for the placing of circuits and making of electrical and hydraulic connections in accordance with System Supplier-furnished drawings, instructions, and field supervision to provide proper connection. CONTRACTOR shall include the services of a System Supplier factory engineer to supervise the making of connections to power supplies, communication circuits, existing control equipment, and any other connections external to the new control equipment; adjust the equipment; initiate and check operation; instruct OWNER's electrician on operation and maintenance of the equipment; and place the equipment in operation in an acceptable manner. This shall include on-site review of software/hardware controls from the central control point.
- F. Any auxiliary interface relays and controls needed for completion of this project, if not specifically called for, shall be by System Supplier.

1.03 QUALITY ASSURANCE

- A. System Suppliers: Firms regularly engaged in the design and manufacture of SCADA systems of the size and complexity specified herein, and whose systems have been in satisfactory use in similar service for not less than 10 years.
- B. Installer: A firm with at least 10 years of successful installation experience on projects with SCADA System design and installation work similar to that required for the project.
- C. Code Compliance: Comply with National Electrical Code (NFPA 70) and any and all local codes as applicable to construction and installation of electrical wiring devices, material, and equipment herein specified.
- D. UL Labels: Provide control panels, power supplies, controllers, relays, wire, and connectors that have been listed and labeled by Underwriters Laboratories.
- E. NECA Standards: Comply with applicable portions of National Electrical Contractor's Association's Standard of Installation.

1.04 SUBMITTALS

- A. Manufacturer's Data: Submit manufacturer's data, specifications, and installation recommendations for each item specified herein.
- B. Submit shop drawings and product data in accordance with provisions of Section 01 33 00–Submittals.
- C. Provide product data on all equipment and devices specified herein as well as wiring schematics for all systems.
- D. Shop drawing submittals shall include the following.
 - 1. Detailed catalog information, descriptive literature, and specifications of hardware and software. All items being provided must be specifically noted on this literature, including all field devices and instruments.
 - 2. Project implementation plan, including information on project organization, project management, engineering, programming, configuration, training, startup, and maintenance services. Plan shall include key personnel on project, point of contact, and communication protocol.
 - 3. Overall network schematic showing all controllers, radios, network switches, and hardware addresses applicable to the system.
 - 4. Wiring diagrams for all control panels and MCCs, including modification drawings for existing equipment. Modification drawings shall be completed using electronic CAD software. Handwritten or PDF markups of any kind will not be allowed.
 - 5. Database with PLC addresses.

1.05 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data under provision of Section 01 33 00–Submittals.
- B. Include spare parts data listing, source and current prices of replacement parts and supplies, and recommended maintenance procedures and intervals.
- C. Submit Operation and Maintenance Manuals in accordance with Division 01. The following additional information shall apply:
 - 1. Manuals shall contain, but not be limited to, the following:
 - a. System Hardware.
 - b. System Software.
 - 2. Hardware section shall include:
 - a. Safety precautions, physical description, functional description, operating procedures, theory of operation, maintenance instructions, checkout procedures, troubleshooting procedures, servicing, and removal and replacement procedures.
 - b. Wiring schematic and logic diagrams, parts list, and point-to-point wiring.
 - c. Listing of all hardware timers installed in MCCs and control panels, as well as the ranges set on each timer. Listing shall also include actual timer setting after completion of startup.
 - 3. Software section shall include:
 - a. Software manual shall describe system techniques, general philosophies, list, and description of all standard software.
 - b. Program documentation (i.e., PLCs) shall include programs, documentation files, database and configuration as installed. Provide two USB flash drives with this

information. Usernames and passwords for all programmable devices (i.e., PLCs) shall be turned over to OWNER at the time of final completion.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect equipment from dirt, water, construction debris, and traffic.
- B. Handle in accordance with manufacturer's written instructions. Lift only with lugs provided for the purpose. Handle equipment carefully to avoid damage to control panel components, enclosure, and finish.

1.07 SYSTEM ENGINEERING

- A. System Supplier shall provide all engineering necessary to accomplish and document the requirements of this specification and be in accordance with the system configuration. The engineering to be performed by System Supplier on this project shall include, but not be limited to, the following categories:
 - 1. PLC system layouts.
 - 2. Panel layouts.
 - 3. I/O configuration and wiring diagrams.
 - 4. PLC programming.
 - 5. Network configuration.
- B. Installation: CONTRACTOR shall install all system equipment, including PLCs and interconnecting cabling, as required. This work shall include all interconnection wiring from new and existing equipment as required for the completion of the system.
- C. It shall be the responsibility of System Supplier to ascertain that all field devices are compatible and consistent with the new system design. This includes reviewing drawings and data to ascertain the compatibility and consistency of the system with the field devices on such considerations as:
 - 1. Equipment size and available space.
 - 2. Power levels.
 - 3. Power sources.
 - 4. Logic schemes.
 - 5. Signal types and levels.
 - 6. Interface devices where required.
 - 7. All other aspects of field devices impacting the design of the system.
- D. The system shall be programmed to implement the control sequences and to provide monitoring according to this specification. It shall be the responsibility of System Supplier to include all inputs and outputs required to meet all aspects of this specification, regardless of whether they are specifically included in the I/O listing in this specification.
- E. System Supplier shall provide a complete list of spare parts required and where they may be obtained for operating the system for 3 years from startup.

1.08 CONTRACTOR AND SYSTEM SUPPLIER GENERAL REQUIREMENTS

- A. This specification, along with the Contract Drawings, defines the requirements of a PLC-based process monitoring and control system. System Supplier shall construct a

process monitoring and control system specifically for the demanding requirements of a real-time municipal wastewater treatment system.

- B. It is the intent of this specification to define modifications and additions to an existing fully integrated open-type process monitoring and control system, with new equipment, factory tested, delivered to the site, and ready to function upon connection of a power source and field instrument wiring. Components, peripherals, interconnections, cabling, power supplies, software, and services necessary to form a complete, integrated system shall be identified and provided by CONTRACTOR.
- C. CONTRACTOR shall be responsible for complete coordination in providing all equipment, sensors, and meters supplied with input and output signals, and contacts that are compatible with the systems as specified herein and existing systems. The Contract Drawings and I/O Listing are symbolic representatives of the required work. It is not intended that the Drawings show all appurtenances. CONTRACTOR shall provide a complete and working system according to the true intent and meaning of the Drawings, Specifications, and standard industry practices.
- D. To provide a complete and totally integrated system, a single manufacturer who has experience in furnishing similar networked PLC-based monitoring and control systems of the same complexity and size for municipal wastewater treatment systems shall provide the specified equipment and services. The system proposed to meet this specification shall be of field-proven design incorporating manufacturer's standard equipment and software. Service of all peripheral devices shall be provided by the manufacturer of the process monitoring and control system.
- E. Design and specification of devices and the completed system shall conform to the applicable portions of the latest edition of the National Electrical Code (NEC).
- F. Control panels shall bear a serialized UL label indicating that it is UL approved as an assembled unit. Panels that have individual components that are UL labeled, but do not have UL approval as an assembled unit are not acceptable.
- G. Training Program:
 - 1. Submit a training plan including course syllabus, personnel who will be conducting the training, and schedule.
 - 2. Provide materials, instructors, and workbooks to complete the training.
 - 3. Operator and Maintenance Training course shall consist of one 2-hour session at the WWTP. Training shall utilize equipment specified herein following installation and field testing.
 - 4. Manufacturer's training shall be directed to system and equipment operation, maintenance, troubleshooting, and equipment and system-related areas other than the process itself.
 - 5. Refer to Section 01 91 00—Starting of Systems for additional training requirements.
- H. System Supplier shall meet the following minimum requirements:
 - 1. System Supplier shall have a full-time staff of qualified programmers who are knowledgeable in the configuration of networked computer systems and the PLCs being provided.
 - 2. System Supplier shall have a minimum of one Microsoft-certified engineer.
 - 3. System Supplier shall have training capabilities and shall have conducted training courses in programming and maintenance.

4. System Supplier shall have an adequate inventory of spare parts.
 5. System Supplier shall have a full-time staff of qualified service technicians.
 6. System Supplier shall be responsible for the programming and documentation of the system.
 7. System Supplier shall be responsible for all details that may be necessary to properly install, wire, adjust, and place in operation a complete and working system.
 8. System Supplier shall be responsible for all coordination between the system and the field devices, instrumentation equipment, motor control centers, and equipment furnished with other divisions of this specification. This shall include interface with existing equipment.
 9. System Supplier shall have a UL panel shop located inside the System Supplier's own facilities.
- I. All components shall be standard make acceptable to OWNER, with one manufacturer to provide all similar components. The Base Bid System Supplier shall be L.W. Allen-Altronex, (608) 222-8622, Integrated Process Solutions, (608) 849-4375, Red Automation, (connect@goredautomation.com), or Wunderlich-Malec (952) 933-3222. See General Conditions and Supplementary Conditions regarding substitutions to the Base Bid system suppliers.

1.09 FACTORY ACCEPTANCE TESTING, SYSTEM STARTUP, AND SUPPORT SERVICES

- A. System Supplier shall be responsible for development of a formal address listing associated with each PLC and shall provide ENGINEER with an organized spreadsheet of all addresses to be used for programming of the HMI software specified herein. Point listing shall be provided in Microsoft Excel format, grouped individually for each PLC, and neatly organized into groups such as discrete I/O, analog I/O, setpoints, alarms, historical data, and dialer configuration. Points not used with the HMI software or for internal PLC logic shall be removed or hidden from the listing. Spreadsheet shall be sent to ENGINEER a minimum of 12 weeks prior to the factory acceptance testing specified below. Any revisions made to the original spreadsheet shall be clearly identified by highlighting, colored text, or notes within the documents. CONTRACTOR shall provide ENGINEER an as-built version of the spreadsheet prior to Substantial Completion. Electronic files shall be named with the date and revision number.
- B. Permit ENGINEER and OWNER to observe vendor's staging records or other quality assurance records relating to system(s) supplied. System Supplier shall assemble the system components as a complete process monitoring and control system and demonstrate that the system is operational before shipment from System Supplier factory to the job site. This testing shall be as an integrated assembly by simulating each of the specified I/O points and all specified algorithms.
- C. This test shall be witnessed by OWNER and ENGINEER (two personnel). System Supplier shall provide lodging, meals, and transportation in the Bid for one day as a minimum for this witness test. Travel costs shall include all rental car fees and refueling fees for each person attending where the driving distance is less than 250 miles. Travel costs shall include all airplane travel fees for any personnel travel that would otherwise require a driving distance greater than 250 miles. ENGINEER will travel from Joliet, Illinois and OWNER will travel from Addison, Illinois. All problems, errors, insufficiencies, and failures identified during testing shall be resolved before shipment. In the event the equipment does not operate in accordance with the specifications, programming of controllers/computers is incomplete, or setup of equipment is incomplete, there shall be deducted from payments due

CONTRACTOR the amount of \$1,500 per day for ENGINEER's time plus travel and expenses, \$500 per day for OWNER's travel and expenses, as well as all costs for additional time plus travel and expenses for OWNER and ENGINEER to witness additional factory acceptance testing.

- D. System Supplier shall make provisions to allow ENGINEER to test any modifications to existing PLC logic. This shall include a mock-up in their factory with temporary, equivalent, PLCs using project-specific programs and all required ancillary equipment.
- E. On-Site Functional Acceptance Testing:
 - 1. After all equipment in a particular building has been installed and is placed in full-time operation, CONTRACTOR and System Supplier shall demonstrate that all equipment and controls operate in compliance with the Contract Documents. For each piece of equipment being tested, all systems associated with the operation of the equipment (e.g., controls, supply/discharge piping, etc.) shall be installed and be in full operating condition so that all equipment functions are able to be completely tested without delay using real-time process I/O.
 - 2. All control wiring, hardwired interlocks, control programming, etc., shall be checked out and functionally tested by System Supplier prior to ENGINEER's on-site functional acceptance testing. All functional errors shall be corrected prior to ENGINEER's on-site functional acceptance testing.
 - 3. Coordination Videoconferences:
 - a. CONTRACTOR shall schedule and conduct an initial functional acceptance testing coordination videoconference at least two months prior to the first anticipated functional acceptance testing. The videoconference shall include CONTRACTOR, System Supplier, Division 26 contractor, OWNER, and ENGINEER, and all other parties responsible for the equipment and controls scheduled for functional acceptance testing.
 - b. CONTRACTOR shall schedule and conduct additional functional acceptance testing coordination videoconferences one month prior to the date for functional acceptance testing of each building's equipment to confirm status of equipment installation and System Supplier checkouts, and updates to the functional acceptance testing schedule, after which ENGINEER will finalize reservations for travel and accommodations. All parties shall agree on a date for functional acceptance testing of the next group of equipment at this videoconference, or schedule an additional videoconference to establish a testing date one month prior to the delayed testing date. If the functional acceptance testing is rescheduled within one month of the agreed upon date, there will be deducted from payments due to CONTRACTOR the amount of penalties paid by ENGINEER for travel and accommodation cancellations. OWNER will deduct the amount of these charges from payments made to CONTRACTOR.
 - c. CONTRACTOR shall provide the following information in written form at each videoconference. All information shall be updated prior to each videoconference.
 - (1) Equipment installation and startup schedule.
 - (2) Status of all power and control system wiring for the equipment scheduled for functional acceptance testing.
 - (3) Schedule and status of System Supplier's on-site checkout and functional testing.
 - (4) Anticipated delays and the cause of each delay.
 - (5) Conflicts with OWNER's operation of the facility.
 - (6) Proposed dates for acceptance testing of all equipment and controls.
 - (7) Proposed dates for future acceptance testing coordination videoconferences.

4. After being notified by CONTRACTOR that the equipment has been installed and is in full operating condition and ready for ENGINEER's functional acceptance testing, ENGINEER will make up to four half-day trips to check operation. CONTRACTOR and System Supplier shall be on-site during testing to adjust equipment, correct erroneous wiring, and make modifications to control system as necessary. If the equipment and controls do not operate according to the Contract Documents, or if CONTRACTOR and System Supplier are not present during the scheduled testing, there will be deducted from payments due to CONTRACTOR the amount of \$1,500 a day for ENGINEER's time plus travel and expenses, and for all additional field and office time spent by ENGINEER checking equipment. OWNER will deduct the amount of these charges from payments made to CONTRACTOR.
 5. System Supplier shall provide functional acceptance testing support through one or more on-site field service engineers and the project control system programmer. Time for the on-site field service engineers and programmer scheduled for functional acceptance testing shall be dedicated to the functional acceptance testing process and shall not be interrupted for other construction-related activities.
- F. Final acceptance and payment will not be made until the system has operated satisfactorily for a minimum of 30 consecutive days. CONTRACTOR shall include in the Bid field follow-up to provide proper adjustments and operation during the first year following project final completion. Prior to beginning the 30-day test, the following criteria shall be met:
1. Satisfactory operation of I/O control loops.
 2. Satisfactory operation of software.
 3. Satisfactory operation of control program.
 4. Satisfactory operation of peripheral equipment.
 5. The necessary debugging programs have been performed.
 6. Data output is reliable.
 7. Control loops are operational.
 8. Checking and calibrating of systems have been completed.
- G. CONTRACTOR, through System Supplier, shall provide the following support services:
1. Field Service Engineer: Field service engineer shall be responsible for programming of system PLCs in the factory and at the site. Field service engineer shall be present at the factory acceptance test and be present for startup of all systems and available throughout the entire construction process until final completion. Service technicians sent for system startup will not be acceptable. Support shall include on-site time. Services shall include, but not be limited to:
 - a. Commissioning, installation, startup, and testing of equipment.
 - b. Revising or rewriting manuals to incorporate an installed and accepted system.
 - c. On-site training.
 - d. Software modifications.
 2. In-factory support shall include consultation following the acceptance testing and shipment. Services shall include, but not be limited to:
 - a. Researching and answering questions related to the system operation, documentation, and system use and functions.
 - b. Program modifications.
 - c. Revising or rewriting manuals.
 3. Post-startup support shall include follow-up services during the one-year period following final acceptance. Service shall include follow-up recalibration and replacement of defective equipment, as well as additional training, software modifications, and control configurations as requested by OWNER. This shall include 12 hours for work on-site other than warranty repair or replacement of defective equipment. This time shall

be used for software enhancements and modifications to improve the operation of the system. In addition to the 12 hours, include two trips to the site.

- H. CONTRACTOR shall not install any hardware or software to enable remote access or control without written permission from OWNER and ENGINEER.

1.10 COMMON REQUIREMENTS ALL EQUIPMENT

- A. All indicating and recording devices shall be electric or electronic.
- B. All indicating and control devices mounted on control panel enclosure doors (e.g., meters, gauges, electronic indicators, pilot lights, selector switches, etc.) shall be located at eye level, minimum 48 inches, maximum 60 inches, from floor to bottom of device.
- C. All motor control power shall be 120 volts with suitable circuit protection (fuses or breakers). Fuse holders shall be provided with integral LEDs to indicate when the fuse is blown.
- D. Provide lightning protection, isolation transformers, and fused disconnects at each end of each power circuit, supervisory circuit, and local supervisory circuit with transformers and relays, if necessary, to obtain supervisory power. 120-volt power shall be available at all control points. Lightning protection shall be completely solid-state and self-healing and shall not require the use of fuses. Provide a single switch with an indicating light to deenergize the control power for each location. Each panel shall have a GFI, duplex, 15 ampere, 120-volt receptacle.
- E. If enclosure and back panel space is specified to be provided for the installation of future equipment, the enclosure and back panel shall be constructed to accommodate all future equipment. Supports and wireway shall be provided for future equipment, and openings in the enclosure shall be provided for future pilot devices and covered with neat cover plates matching the finish of the enclosure.
- F. Where equipment is necessary to perform a function as called for in one part of this specification, it shall be provided, even though the detailed enumeration at various control points may omit listing that equipment.
- G. Where a certain accuracy of sensing and transmitting levels, flows, or other process conditions and controlling operations are called for, means shall be provided to read or determine that the process conditions are within the limits or accuracy specified for the sensing, transmitting, and controlling devices. Where no accuracy is specified, but a knowledge of process conditions is necessary to set operating points, provide accuracy consistent with the requirements for operation of the system.
- H. All control and auxiliary relays shall have indicating LEDs. All timing relays shall have On and timing Out LEDs.

1.11 GENERAL CONTROL ALGORITHMS

- A. Definitions:
 - 1. The "Main PLC" for the SCADA System is the PLC located in RTU-8 in the SHB. The PLC logic common to all networked PLCs resides in the Main PLC including, but not limited to, PLC time and date settings, software alarm dialer communication fail

- monitoring, hardware alarm dialer activation, and networked PLC communication fail monitoring.
2. Where referenced herein, a "Networked PLC" includes any PLC directly connected to the SCADA System Ethernet network.
- B. Programming algorithms described herein and in Part 3—Execution shall reside within the PLC associated with that equipment and not in the Main PLC.
 - C. All alarm contacts or system changes following a command must exist or not change for 0 to 5 seconds to activate an alarm at the SCADA System.
 - D. All analog and digital inputs shall be monitored in the PLC. This shall include, but not be limited to, flows, pressures, and levels. The following analog signals shall have minimum, maximum, and running average calculated values: all flows, levels, and pressures. Instantaneous values, maximum, minimum, and average values shall be read by the HMI software and be reset on a daily basis as described below. Minimum, maximum, and average values shall be stored in the PLC for the current day and previous day.
 - E. Minimum, maximum, and average values as described above shall be reset on a daily basis. This reset shall occur based on a time (hour and minute) setpoint stored in the Main PLC through the HMI software and shall be automatically communicated to all Networked PLCs so that each PLC will reset daily totals for its associated equipment even if there is a loss of communication with the Main PLC. The operator shall set the time when the daily reset will occur. Once this time setpoint matches the current time of the processor clock, each PLC shall clear any totals that have accumulated locally.
 - F. The PLC shall calculate cumulative totals for all runtimes, number of starts, and flows. Maximum, minimum, and running average for all analog inputs shall also be included as part of the cumulative total algorithm. Cumulative totals shall totalize until manually reset by the operator. The reset tag within the PLC shall be set by the operator at the HMI software and reset by the PLC. There shall be a manual reset for each signal. The PLC shall display the date of the last cumulative totalizer reset for each signal.
 - G. Indication of time remaining for all timers (hardcoded and operator adjustable) within PLCs shall be made available for indication at the SCADA System.
 - H. All analog signals shall be scaled to engineering units in the PLC with real or floating-point data types to prevent scaling values in the HMI. System Supplier shall provide all analog ranges and PLC register/tag addresses to ENGINEER for use with the HMI software. This shall include upper and lower limits for the associated device (i.e., 0 to 150 psi).
 - I. PLCs shall be set up so that the ranges of all analog input signals to the PLC I/O cards can be configured from the HMI software. Provide two operator-adjustable setpoints for each analog input, one corresponding to 4 mA and the other corresponding to 20 mA. These setpoints are applicable to devices attached to the Networked PLCs. This feature is intended to be used for startup and calibration purposes.
 - J. The SCADA System shall allow the operator to change all setpoints and operating parameters within the PLCs as described herein. All control algorithms and alarms for equipment shall be programmed in the associated PLC and not in the Main PLC. There shall be no control algorithms or alarms in the SCADA computers.

- K. Each alarm shall have a discrete PLC tag that is able to be toggled at the SCADA System HMI to enable or disable the associated alarm from being activated.
- L. All alarms shall be tied to the software dialer. The assignment of all alarms to the software dialer shall be done through the SCADA System and be flexible for operation. In the event of an alarm, the software dialer shall inform the operator as to what station or piece of equipment is in alarm. Provide a bit for each alarm that can be manipulated at the SCADA System allowing the operator to enable or disable the alarm from being sent to the software dialer. Regardless of the state of the bit, the alarm shall be displayed at the SCADA System. An alarm silence/acknowledge bit shall also be provided to silence the alarm horn and disable all active alarms from being sent to the software dialer and/or paging system.
- M. The software alarm dialer shall be monitored and annunciated from the Main PLC and the SCADA System. The software dialer shall be the primary means of alarm call-out, and the common alarm to the hardwired backup dialer shall only be activated when the PLC loses communication with the software dialer or if any active alarms have not been acknowledged for 1 hour. The PLC shall communicate with the software dialer through the HMI software utilizing an internal PLC register that is constantly being written to by the software dialer through the HMI software.

1.12 SPARE PARTS

- A. System Supplier shall furnish spare parts for equipment specified herein as follows:
 - 1. One PLC power supply.
 - 2. One I/O card of each type.

1.13 WARRANTY

- A. Standard One-Year Warranty: Unless otherwise stated below, manufacturer shall warrant the equipment to be free from defects in material and workmanship for a period of one year from Substantial Completion of the project.

PART 2-PRODUCTS

2.01 SCADA SYSTEM COMPUTERS AND SOFTWARE

- A. The SCADA computer is existing and is located in the Main Control Building (MCB) where shown on the Drawings.
- B. The existing SCADA graphics software on the SCADA computer is AVEVA System Platform 2020, R2.
- C. The existing software alarm dialer is Win911.

2.02 HUMAN MACHINE INTERFACE (HMI) CONFIGURATION

- A. The HMI configuration will be performed by ENGINEER.

2.03 EQUIPMENT ENCLOSURES

- A. New enclosures shall be front-access only, minimum No. 14 gauge steel, with continuously-hinged doors. Enclosures equal to or smaller than 24 inches wide by 24 inches high shall be equipped with at least two quarter-turn latches. Enclosures larger than 24 inches in any dimension shall be equipped with 3-point latch with top and bottom bolts actuated by one rotating, lockable handle on each door. Provide a doorstop kit for each door, data pocket for wiring diagrams, and minimum 12-inch, bolt-on, LED light and door switch. Panels over 48 inches wide shall have two lights. Painting shall include phosphate treatment, zinc chromate iron oxide primer, baked rust-inhibiting enamel, and white interior. All doors and panels shall be gasketed. All louvers shall be filtered, and forced-air cooling shall be provided as necessary for conditions where installed. Provide enclosure dimensions as specified herein. Enclosures shall be as manufactured by Hoffman or Saginaw. MCC structures are not acceptable. Where installed next to motor control centers, enclosure color shall match that of the MCC.
- B. Each PLC and remote I/O enclosure or back panel shall include, but not be limited to, the following equipment:
 - 1. PLC, I/O modules, and communication modules.
 - 2. Power supplies.
 - 3. Surge protective devices.
 - 4. DIN-rail mounted terminal blocks for field wiring terminations.
 - 5. Plastic wiring ducts.
 - 6. General purpose 15-amp, 120-volt AC duplex GFCI receptacle.
 - 7. 20-amp, 120-volt AC main circuit breaker and branch circuit breakers as required to feed the PLC and the I/O controlled field devices.
 - 8. Other accessories required to provide a complete and working PLC system.
 - 9. UPS backup for the control panel.
 - 10. Network switch.
 - 11. Front panel-mounted programming port with RJ-45 jack and 120-volt receptacle (new control panels only).
- C. The equipment mounted within the enclosures shall be mounted on the enclosure back panel, neatly organized, and shall be in accordance with the manufacturer's recommendations.
- D. Refer to Section 26 05 53—Electrical Identification for the control panel and field wiring color code.
- E. 24 VDC power supplies shall be provided in the enclosures to power all 24 VDC devices and loop-powered analog input signals, where required.
- F. NEMA ratings of enclosures shall be as required for the area where installed, unless specified otherwise.
- G. Manufacturer of Accessories:
 - 1. Plastic wiring duct shall be Panduit Panduct, or equal.
 - 2. Terminal blocks shall meet the requirements of Section 26 05 19—Wire.
 - 3. Wire markers shall meet the requirements of Section 26 05 53—Electrical Identification.
 - 4. Circuit breakers shall be Square D Type QO with mounting bases, or equal. Circuit breakers can be rail-mounted type, Square D, Class 9080, Type GCB-150, or equal.
 - 5. Signal conditioners shall be Action Instruments, DIN rail mount, or equal.

6. Power supplies shall be Allen-Bradley Model 1606-XLS, or equal, and shall meet the following requirements:
 - a. Sized for the connected load plus inrush with capacity for a 50% power boost for up to 5 seconds.
 - b. Integral, dry-contact relay for monitoring "DC OK" status at the SCADA System.
 - c. UL listed.
 - d. Conformal coated.
 - e. Temperature range: -25°C to 60°C.
 - f. Protection features:
 - (1) Over-voltage protection.
 - (2) Protection against no-load and short-circuit conditions.
 - (3) Overtemperature protection.
 - (4) Internal input fuse.
 - (5) MOV-type input transient protection.
- H. All wiring within the enclosure or on the back panel shall be through plastic wiring troughs. Plastic wiring troughs shall have removable covers. Maximum fill for wiring troughs shall be 60%. All wiring in supervisory enclosures and control panels not in wiring troughs shall be bound with continuous-type spiral windings. Terminal strips located adjacent to wiring troughs shall have a minimum of 1 1/2 inches between terminal strip and wiring trough. All wiring labels shall be able to be read without removing wiring trough covers. Wiring troughs shall be provided for all field wiring.
- I. All wiring for new panels shall be done in the factory, Class II, Type C with master terminal strips for exterior connections. Terminal strips shall be located either at the bottom or on the side of the enclosure, depending on where the I/O conduits penetrate the enclosure. Splices are not allowed within enclosures or wireways. All enclosures must pass through doors to point of installation, and if enclosures are shipped in sections, all wiring and connections between sections shall be done by CONTRACTOR. The field wiring terminals shall be clearly identified with which I/O terminals they are wired to. Jumpers between adjacent terminal blocks shall be copper jumper bars supplied by the terminal block manufacturer. All wiring shall be labeled at each end with corresponding numbers matching the associated terminal block. This numbering shall be shown on the shop drawings and record drawings.
- J. All door-mounted devices shall be furnished flush-mounted, and an exterior-engraved phenolic nameplate worded by OWNER (upon receipt of shop drawings) shall be provided for each component, device, and light. All components within the enclosures shall be identified with sticky-back adhesive, self-laminating, machine-printed marking labels with white background and black text; minimum size 12 font. Labels shall be installed on the enclosure back panel and not on the device or wireway. Devices shall be grouped for each device or unit being controlled.
- K. All panels with DIN rail-mounted equipment shall include a minimum of 25% spare DIN rail space.
- L. In addition to spare I/O specified herein, provide a minimum of 25% spare hot and neutral terminals wired to terminal strips. Spares shall be provided for all voltage sources within the panel (e.g., 120 V, 24 V).

2.04 COMPACTLOGIX PROGRAMMABLE LOGIC CONTROLLERS

- A. Construction:
 - 1. The PLC shall include a CPU, memory, embedded dual Ethernet ports, and embedded energy storage.
 - 2. The PLC and all system modules shall be DIN rail-mounted.
 - 3. All system modules shall be able to operate in an industrial environment with an ambient temperature of 32°F to 140°F.
 - 4. All system modules shall be able to operate in a free airflow environment.
 - 5. All system modules shall be able to operate in high electrical noise environments.
- B. The system shall support a minimum of eight local I/O expansion modules in up to three chassis, along with remote I/O expansion modules connected via the Ethernet network.
 - 1. Local expansion modules shall be installed in the local chassis or in chassis adjacent to the local chassis.
 - 2. The manufacturer shall have available a variety of I/O modules, including, but not limited to, AC or DC discrete input, AC or DC relay contact output, 4-20 mA analog input and output, and RTD.
 - 3. Each chassis in multiple-chassis installations shall be interconnected via Ethernet.
 - 4. Discrete I/O cards shall be 120 VAC, 16-point maximum, unless otherwise noted.
 - 5. Isolated discrete I/O cards shall be 8-point maximum. Isolated discrete cards shall be used if there are multiple or external power sources associated with the signals, if wiring leaves the building, or if the card is driving a load, (i.e., solenoids, etc.).
 - 6. Analog input cards shall be 8-point.
 - 7. Analog output cards shall be 4-point isolated type.
- C. CPU:
 - 1. The CPU shall be a self-contained unit, and shall be capable of providing control program execution, supporting remote and local programming, controlling all I/O scanning, and inter-controller and peripheral communication and diagnostic functions as follows:
 - a. 32 tasks (1,000 programs per task):
 - (1) Continuous—one allowed.
 - (2) Periodic—Run via an interrupt at a user-defined interval in 1 µs increments from 1 ms to 2000 s.
 - (3) Event—Triggered by consumed tag or EVENT instruction.
 - b. 256 controller connections.
 - c. Network connections:
 - (1) Up to 256 EtherNet/IP.
 - (2) Up to 120 TCP/IP.
 - 2. The PLC shall organize user applications as tasks, which can be specified as continuous, periodic, or event based. Tasks shall be triggered by input point or instruction.
 - 3. The CPU shall have a real-time clock.
 - 4. When the main power supply is removed, the CPU shall have the ability to back up user program and all data, or a nonenergy storage option.
 - 5. The front of the CPU shall have a USB port.
 - 6. The front of the CPU shall have an integrated latching mechanism for securing the secure digital (SD) memory card. The PLC shall operate with the memory card removed.
 - 7. The processor module shall have LED indicators to indicate CPU status.
 - 8. The processor module shall have a mode switch.

- D. Memory:
1. The PLC shall have a minimum of 3 MB of standard user memory. Provide processor configurations with additional memory as required.
 2. The program storage medium shall be solid-state, nonvolatile type.
 3. The PLC shall include a 2 GB SD memory card to store the user program and the firmware of all modules residing in the same chassis to protect against memory loss.
- E. Programming Environment:
1. Programming shall be through the USB 2.0 port or through the EtherNet/IP network.
 2. Programming software shall run on the latest version of Windows and the programming methods shall be:
 - a. IEC 61131-3-compliant ladder diagram.
 - b. Structured text.
 - c. Function block diagram.
 - d. Sequential function chart.
- F. Communication:
1. USB 2.0 port to support upload and download, online edits, firmware updates, and bridging to other modules.
 2. EtherNet/IP switch and dual 10/100/1000 Mbps EtherNet/IP ports with unique IP addresses or a single IP address when connected as part of a device level ring. The interface shall support:
 - a. IEEE 802.3 Physical and Data Link Standard.
 - b. Common Industrial Protocol (CIP), the protocol that provides real-time I/O messaging and information/peer-to-peer messaging.
 - c. Standard TCP/IP and UDP/IP communication.
 - d. 10/100/1000 Mbps auto sensing and auto switching.
 - e. Standard Ethernet media.
 - f. Subnet masking.
 - g. BOOTP and DHCP support.
 - h. Manual configuration using specified software.
 - i. Programmable Logic Controller messaging to peer controllers and workstations.
 - j. I/O data, real-time interlocking and information.
 - k. Full or half-duplex communication.
 - l. Built-in web access to diagnostics.
 - m. I/O control.
 - n. Precision Time Protocol (CIP Sync, IEEE 1588).
- G. Power Supply:
1. The PLC shall be provided with separate, dedicated, field-side power supplies, quantity as needed, for sensor/actuator (SA) power, and a separate, dedicated, system-side power supply for power to the PLC and I/O modules (MOD) power.
 2. Provide field-potential-distributor modules as needed to transition SA power from AC to DC or from DC to AC input power for downstream I/O modules.
- H. PLCs shall be as manufactured by Rockwell Automation, CompactLogix 5380 L3 Series, or equal.
- I. PLC Programming and PLC Software: System Supplier shall provide all PLC programming and software required to meet this specification. The software shall include, but not be limited to, the following:

1. PLC logic programs to be written by System Supplier for the PLC systems to accomplish the monitoring and control functions as specified herein. The System Supplier shall document and annotate the programs, update them as required after startup, and then turn two copies of the programs over to OWNER on two USB flash drives with project-specific labels.
2. System Supplier shall provide a commercially available PLC programming and documentation software package as developed by the system manufacturer for documenting and modifying the PLC programs.
3. All I/O addressing that is to be viewed or manipulated by the HMI software shall be organized into contiguous blocks of integer tags for discrete bits and floating point tags for all other values to facilitate block data transfer between computers and PLCs.

2.05 REMOTE I/O SYSTEMS

- A. Construction:
 1. A single local chassis shall house a communication module, power supplies, and I/O modules.
 2. All system modules shall be DIN rail mounted.
 3. All system modules shall be able to operate in an industrial environment with an ambient temperature of -4°C to 131°C.
 4. All system modules shall be able to operate in a free airflow environment.
 5. All system modules shall be able to operate in high electrical noise environments.
- B. Communication:
 1. All I/O shall be communicated via the EtherNet/IP network protocol.
 2. One 10/100/1,000 Mbps EtherNet/IP port.
- C. I/O Modules
 1. The system shall support a minimum of 13 I/O modules.
 2. Discrete I/O cards shall be 120 VAC, 16-point maximum.
 3. Analog input cards shall be 8-point, maximum.
 4. Analog output cards shall be 4-point, maximum.
- D. Power Supply:
 1. The communication module shall be provided with separate, dedicated, field-side power supplies, quantity as needed, for sensor/actuator (SA) field power, and a separate, dedicated, system-side power supply for power to the communication module and I/O modules (MOD) power.
 2. Provide field-potential-distributor modules as needed to transition SA power from AC to DC or from DC to AC input power for downstream I/O modules.
- E. Remote I/O shall be as manufactured by Allen Bradley, Bulletin 5069 Compact 5000 I/O with Bulletin 5069-AENTRK EtherNet/IP adapter, or equal. All remote I/O components shall be compatible with the PLCs specified herein.

2.06 UNINTERRUPTIBLE POWER SUPPLIES

- A. Provide a UPS backup in each control panel that will provide continuous communication for at least 30 minutes following a power failure. UPS power shall be provided, at a minimum, to the following equipment:
 1. PLCs and I/O cards, and controllers.
 2. Network switches, signal converters, and other communication devices.

3. Power fail and communication indicating lights and alarm devices.
 4. Power supplies for loop-powered instruments.
 5. Automatic alarm dialers.
- B. Control panels with PLCs shall be provided with a 24 VDC battery controller for a UPS system.
1. UPS shall have a rated current of 40 A, battery charging current of 2 A, and dry contacts rated for 30 VDC, 1 A for DC Bus OK, Battery Fail, and Battery Discharged.
 2. UPS shall be Delta Model DRU-24V40ABN, or equal, with external battery sizes and quantities needed meet the runtime requirements specified herein.

2.07 INDUSTRIAL CONTROL RELAYS AND CONTACTORS

- A. Industrial control and power relays shall be installed in motor control centers, pump control panels, and motor controller enclosures where required by System Supplier. Relays used to interface with PLC I/O, motor control circuits, hardwired control logic, and for loads less than 8 amps shall be terminal-style, interposing/isolation relays. Relays for inductive loads, alarm lights, alarm horns, field wiring, or loads up to 15 amps shall be industrial, general purpose, square base relays.
- B. Relays shall meet the following requirements:
1. Interposing/isolation relays:
 - a. Configuration: SPDT or DPDT as required by System Supplier.
 - b. Mounting: DIN rail with screw terminal base socket.
 - c. Voltage: 120 VAC, or as required by System Supplier.
 - d. Contact rating: 8 A (DPDT), 16 A (SPDT).
 - e. Operating life: 10 million cycles.
 - f. Status: On-Off flag-type or LED indicator.
 - g. UL listed.
 - h. Manufacturer: Allen-Bradley, 700-HK, or equal.
 2. General purpose relays:
 - a. Configuration: DPDT or 3PDT as required by System Supplier.
 - b. Mounting: DIN rail with screw terminal base socket.
 - c. Voltage: 120 VAC.
 - d. Contact rating: 15 A, minimum; 3/4 hp.
 - e. Operating life: 10 million cycles.
 - f. Status: On-Off flag-type or LED indicator.
 - g. UL listed.
 - h. Manufacturer: Allen-Bradley, 700-HB, or equal.

2.08 AUTOMATIC DIALER

- A. The dialer shall be a solid-state component capable of dialing up to 16 phone numbers, each up to 24 digits in length. Phone numbers and standard pulse dialing or touch tone DTMF dialing shall be user-programmable via the system's keyboard or touch-tone phone.
- B. The unit shall have two categories of speech message capability, all implemented with permanent nonvolatile solid-state circuitry with no mechanical tape mechanisms.

User Field Recorded Messages

The user may record and rerecord their own voice messages for each input channel and for the Station ID. The time for each message shall be adjustable, and recordings may be made at the front panel or from any remote touch-tone phone. Provisions shall be included for status only (nonalarmable) messages.

Permanent Resident Nonrecorded Messages

Permanent built-in voice messages shall be included to support user programming operations, to provide supplemental warning messages such as advising that the alarms have been disabled, and to allow the unit to be fully functional even when the user or installer has not recorded any messages of its own.

- C. The user may optionally elect to alter the following parameters from the standard normal default values via keyboard entry or remotely from any touch tone phone.
- D. Alarm Call Grouping:
 - 1. On alarm, system shall selectively call the correct phone numbers according to the current alarm(s):
 - a. Alarm Response Delay: 0.1 to 999.9 seconds.
 - b. Delay Between Alarm Call Outs: 0.1 to 99.9 minutes.
 - c. Alarm Reset Time: 0.1 to 99 hours or "NO RESET."
 - d. Incoming Ring Response (answer) Delay: 1 to 20 rings.
 - e. Number of Message Repetitions: 1 to 20 repetitions.
 - 2. Input Alarm Criteria: Each channel shall be independently configured for "Alarm On Open Circuit," "Alarm On Closed Circuit," or "No Alarm."
 - 3. Autocall Test: When enabled, the unit shall place a single round of test calls, both at the time this function is enabled and also at regular subsequent intervals, until this function is disabled at the keyboard.
 - 4. Runtime Meter: Selected inputs shall accumulate and report the number of hours that its input contacts have been closed.
 - 5. Remote System Microphone Activation:
 - a. Remote and Local Arming and Disarming of System.
 - b. Pulse Totalizer Function.
- E. User-entered programming and voice messages shall be kept intact even when all power is removed for up to ten years.
- F. Acknowledgment of an alarm phone call is to be accomplished by pressing a Touch Tone "9" as the alarm call is being received and/or by returning a phone call to the unit after having received an alarm call.
- G. The unit shall continuously monitor the presence of AC power and the status of four contact closure inputs. AC power failure, or violation of the alarm criteria at any input, shall cause the unit to go into alarm status and begin dialouts.
- H. Upon initiating an alarm phone call, the system is to "speak" only those channels that are currently in "alarm status."

- I. The unit shall be capable of dialing any phone number on command and function as a speaker phone.
- J. Inquiry phone calls shall be able to be made directly to the unit at any time from any telephone, locally or long distance, for a complete status report of all variables being monitored, including power status.
- K. Normal power shall be 105 to 135 VAC, 15 watts nominal. The product shall contain its own gel cell rechargeable battery that is automatically kept charged when AC power is present. The system shall operate on battery power for a minimum of 6 continuous hours in the event of AC power failure. A shorter backup time shall not be acceptable. The built-in charger shall be precision voltage controlled, not a "trickle charger," to minimize recharge time and maximize battery life.
- L. The dialer shall utilize a standard cellular router. Router shall be provided with the dialer and shall be coordinated with OWNER such that it is compatible with OWNER's cellular provider. OWNER will provide the cellular service for the router.
- M. Gas tube and solid-state surge protection shall be provided on all inputs, including power, phone, and signal lines. These protectors are to be integrally incorporated into the main circuit board for maximum protection. Protectors mounted external to the main circuit board shall not be an acceptable substitute. Supplier shall provide a good electrical ground connection point near the unit to maximize the effectiveness of the surge protection.
- N. The system shall include expansion connectors to accommodate field upgrades for additional dry contact inputs, remote supervisory control outputs, analog inputs, and communication with remote printers and computers.
- O. All keyboard and front panel switches shall be sealed to prevent contamination. Front panel LEDs shall indicate the following: Normal Operation, Program Mode, Phone Call in Progress, Status for each channel, AC Power Present, AC Power Failure, and Low Discharging or Recharging Battery. On any Inquiry telephone call or On Site status check, the voice shall provide specific warning if no dial-out phone numbers are entered, if the unit is in the "alarm disable" mode, or if AC power is off or has been off since last reset. A built-in microphone shall allow anyone at a remote phone to listen to local sounds and have a two-way conversation with personnel at the dialer.
- P. The dialer shall be as manufactured by RACO, Verbatim Series VSS, or equal.

2.09 INDUSTRIAL ETHERNET SWITCHES

- A. Managed Switches: For Gigabit Uplink, provide managed Ethernet network switches with Gigabit-Uplink SFP ports where shown on the Drawings. Network switches shall be as manufactured by Allen-Bradley Stratix 5700 series or Hirschmann BRS30 (non-PoE) series. Each switch shall include, but not be limited to, the following:
 - 1. Selectable Gigabit Ethernet star or ring topology with redundant failover. Switches shall be configured for a ring topology, unless noted otherwise.
 - 2. DIN rail mounting and redundant 24-volt DC power supply inputs. Provide redundant power supplies, Hirschmann Model RPS series, or equal.
 - 3. Command line interface, DHCP, and store and forward switching.
 - 4. SNTP real time clock.
 - 5. IP and MAC port security and SNMPv3.

6. Compliance with the following IEEE Standards: 802.1D, 802.1p QoS, 802.3, 802.3u, 802.3x flow control, 802.1w RSTP, and 802.1Q VLAN.
7. SNMP with web browsing for switch configuration, diagnostics, and monitoring.
8. Dry contact alarm output for indication that the switch has failed.
9. Up to 16 copper 10/100 Fast Ethernet ports. The switch shall have a minimum of 25% spare ports.

PART 3–EXECUTION

3.01 SUPERVISORY CONTROL CENTER (SCC) AND REMOTE I/O PANEL (RIO)–GENERAL

- A. Control descriptions described herein are specific in nature to equipment associated with each SCC. CONTRACTOR shall refer to Section 1.12–General Control Algorithms for additional programming requirements. Control descriptions shall reside in each local PLC and not in the Main PLC.
- B. UPS's installed in all SCCs and RIOs shall be configured to provide dry contact outputs to the PLC for “UPS DC Bus OK,” “UPS Battery Fail,” and “UPS Battery Discharged” signals.
- C. Provide a control power fail relay in each SCC and RIO that shall be used to indicate an incoming control power fail alarm at the SCADA System. Provide a red indicating light on the front of each SCC and RIO to indicate a loss of incoming line power to the SCC/RIO. Control power fail wiring shall be hardwired and not through the PLC.
- D. There is a configurable network switch fail contact available at each managed network switch. This fail contact shall be wired to a relay, which shall be wired to the associated PLC for indication of a common network switch alarm. Each network switch shall be configured by System Supplier (via software) to provide this alarm.
- E. Provide redundant 24-volt DC power supplies powered from the UPS in each associated SCC/RIO that are sized to power the network switch in the SCC/RIO. Provide additional pairs of redundant power supplies as needed to power all network switches. There is a dry contact output for a power supply failure alarm available at each power supply that shall be wired to discrete input cards in the SCC/RIO, as noted in the Section 26 09 90–SCADA System I/O Listing, to activate an alarm at the SCADA System when a primary or secondary power supply fails.
- F. Refer to the Section 26 09 90–SCADA System I/O Listing for all required I/O that shall interface with each PLC. For each PLC, provide the lesser of a minimum of 25% spares or one completely spare I/O module for analog and discrete inputs and outputs. All spare and unused I/O shall be wired to terminal blocks.
- G. All SCADA 3000 modules that are removed from the existing enclosures shall be turned over to OWNER.

3.02 MTU MODIFICATIONS (MAIN CONTROL BUILDING)

- A. The existing MTU Panel in the Main Control Building has a door-mounted Allen-Bradley OIP and contains a SCADA 3000 input module, a serial/Ethernet converter, a MicroLogix 1400 PLC, an MDS radio, an N-Tron 104TX network switch, a weather station interface module, and associated power supplies. Remove the existing SCADA 3000 input module,

serial/Ethernet converter and MicroLogix 1400 PLC as described in the construction sequence in Section 01 11 00–Summary of Work. Refer to Section 26 09 90–SCADA System I/O Listing for a list of signals to remove. Wiring associated with the SCADA 3000 input module and MicroLogix 1400 PLC shall be removed back to source or associated terminal block in this panel. If wiring has no associated terminal block, use existing terminals, and provide new wire label. The Allen-Bradley OIP and associated wiring and power supply shall be removed and turned over to OWNER. Replace stainless steel plate that the OIP is mounted to with new stainless steel plate to cover opening in panel. The MDS radio and weather station interface module and associated wiring shall remain.

- B. Wiring drawings for this panel do not exist. System Supplier shall include time in the Bid to document all existing wiring within the panel and prepare an existing wiring drawing. OWNER personnel will be made available to assist with identifying existing wiring; however, it is ultimately the System Supplier's responsibility to identify all wiring. It is not necessary to show exact terminations at the field device for wiring that will not be removed as part of this project. The existing wiring diagram shall be used as the basis for a demolition drawing showing the wiring to be removed as part of this project. The demolition drawing shall be submitted with the drawings for the proposed panels for shop drawing review.

3.03 SCC-MCB (MAIN CONTROL BUILDING)

- A. Provide a new NEMA 12, PLC-based supervisory control center, sized a minimum of 24 inches and maximum of 36 inches wide by 12 inches deep by 48 inches high, suitable for wall mounting where shown on the Drawings. The PLC in this panel shall incorporate the I/O from RIO-CL2. This PLC shall set and reset a bit internal to this PLC every second to be read by the HMI graphics for communication fail monitoring at SCADA. This date and time setting in this PLC shall be able to be set by the Main PLC as described in RTU-8 Modifications. This PLC shall have an additional internal bit to copy the heartbeat bit in the RTU-8 PLC for communication fail monitoring by the RTU-8 PLC.
- B. The communication fail alarms produced by this PLC as described in Part 1 of this Specification shall be included in the alarm array described in RTU-8 Modifications. Communication fail alarm for communication between this PLC and the RTU-8 PLC shall be in this PLC with the same functionality as alarms in the RTU-8 PLC.
- C. Provide a backup hardwired dialer in this SCC for the following alarms:
 - 1. Main PLC scan fail, as described herein.
 - 2. PLC Power Supply fail, as described herein.
 - 3. Software alarm dialer common alarm, as described herein.
 - 4. Provide one spare hardwired dialer input.

3.04 RSPS PC/IO RACK MODIFICATIONS (RAW SEWAGE PUMP STATION [RSPS])

- A. The existing PC/IO Rack Panel in the RSPS contains two SCADA 3000 input modules, an electronic timer, and two Square D Sy/Max controllers. Remove both existing SCADA 3000 input modules as described in the construction sequence in Section 01 11 00–Summary of Work. Refer to the Section 26 09 90–SCADA System I/O Listing for list of signals to remove. Wiring associated with the SCADA 3000 input modules shall be removed back to source or associated terminal block in this panel. If wiring has no associated terminal block, use existing terminals, and provide new wire label.

- B. Wiring drawings for the SCADA 3000 modules do not exist. System Supplier shall include time in the Bid to document all existing SCADA 3000 module wiring, including the power wiring, and prepare an existing SCADA 3000 module wiring drawing. OWNER's personnel will be made available to assist with identifying existing wiring; however, it is ultimately the System Supplier's responsibility to identify the wiring. The existing wiring diagram shall be used as the basis for a demolition drawing showing the wiring to be removed as part of this project. The demolition drawing shall be submitted with the drawings for the proposed panels for shop drawing review.

3.05 EXCESS FLOW PUMP STATION CONTROL PANEL (PLC-EF) MODIFICATIONS (RAW SEWAGE PUMP STATION [RSPS])

- A. The existing PLC-EF Panel in the RSPS Building contains a CompactLogix L32E PLC with 5 spare digital and 4 spare analog inputs. There is space on the existing DIN rail for 3 additional I/O modules. Provide new digital input card on available DIN rail space. Provide wiring and terminal blocks as necessary for new inputs as shown in Section 26 09 90–SCADA System I/O Listing. Include time in the bid to modify existing panel drawings for these changes. The PLC in this panel shall incorporate the I/O from RIO/STB.
- B. Wiring drawings for this panel exist in hardcopy form and will be made available to the successful System Supplier from OWNER. System Supplier shall mark the existing drawings to show the inputs that have been used and equipment that has been added and submit the drawings for shop drawing review. New drawings showing the new wiring shall be prepared in electronic format.

3.06 MOTOR CONTROL CENTER-3 (MCC-3) MODIFICATIONS

- A. There are three existing Primary Clarifier starter buckets in MCC-3 in the RSPS Building. Provide a new relay in available space in each bucket, and wiring and terminals as necessary to duplicate the existing fail signal for monitoring at the SCADA System via PLC-EF.
- B. Wiring drawings for the existing MCC buckets do not exist. System Supplier shall include time in the bid to investigate the existing wiring in enough detail such that the new drawing showing the input to the PLC includes the wiring to the coil of the new relay.

3.07 RIO-STB (FORMERLY STB PC/IO RACK) MODIFICATIONS (SECONDARY TREATMENT BUILDING[STB])

- A. The existing PC/IO Rack Panel in the STB contains two SCADA 3000 input modules, a power supply, a time switch, and two Square D Sy/Max controllers. Remove both existing SCADA 3000 input modules as described in the construction sequence in Section 01 11 00–Summary of Work. Refer to the Section 26 09 90–SCADA System I/O Listing for list of signals to remove. Relocate existing wiring in this panel as necessary to make room for new back panel. The Sy/Max controllers, time switch, and associated wiring shall remain.
- B. Provide a new back panel in the space of existing SCADA 3000 input modules. The available space is approximately 24 inches wide and 18 inches tall. Back panel shall include a new network switch, UPS, RIO module and associated power supply, and terminal blocks. Provide a shelf mounted in available space in the upper portion of this panel for mounting UPS batteries. The new RIO module and network switch shall be powered through the UPS

via the same existing circuit as the Square D Sy/Max controllers. Include time in the Bid to document where the circuit that powers the back panel originates. All I/O wired to this panel shall be communicated with the PLC in PLC-EF via the Ethernet network.

- C. Provide relays, wiring, and terminals on new back panel as necessary to duplicate existing Intermediate Screw High Level, Final Screw High Level, and each of the seven Intermediate and Final Clarifier Fail signals. The Intermediate Screw High level and Final Screw High Level signals shall be wired from the existing Sy/Max Controller inputs labeled "INT High Level" and "Returns High Level," respectively. The three Intermediate and four Final Clarifier Fail signals shall each be wired from the existing Sy/Max Controller inputs labeled "INT Final #1 Failure," "INT Final #2 Failure," "INT Final #3 Failure," "Final #1 Failure," "Final #2 Failure," "Final #3 Failure," and "Final #4 Failure."
- D. Wiring drawings for the SCADA 3000 modules do not exist. System Supplier shall include time in the bid to document all existing SCADA 3000 module wiring, including the power wiring, and prepare an existing SCADA 3000 module wiring drawing. OWNER's personnel will be made available to assist with identifying existing wiring; however, it is ultimately the System Supplier's responsibility to identify the wiring. The existing wiring diagram shall be used as the basis for a demolition drawing showing the wiring to be removed as part of this project. The demolition drawing shall be submitted with the drawings for the proposed panels for shop drawing review.

3.08 RIO-CL2 (FORMERLY RTU-5) MODIFICATIONS (CHLORINE BUILDING [CL2])

- A. The existing RTU-5 Panel in the CL2 contains a SCADA 3000 input module and a Cisco network switch. Remove the existing SCADA 3000 input module as described in the construction sequence in Section 01 11 00–Summary of Work. Refer to the Section 26 09 90–SCADA System I/O Listing for list of signals to remove. Wiring associated with the SCADA 3000 input module shall be removed back to source or associated terminal block in this panel. If wiring has no associated terminal block, use existing terminals, and provide new wire label.
- B. Provide a new RIO module and associated power supply and terminal blocks on existing back panel. Provide a new UPS in available space in this panel. The available space on the existing back panel is approximately 18 inches wide and 12 inches tall, with an additional space that is 6 inches wide and 6 inches tall. The new RIO module and the existing Cisco network switch shall be powered through the UPS via the existing circuit powering the Cisco network switch. Include time in the Bid to document where the circuit that powers the back panel originates. All I/O wired to this panel shall be communicated with the PLC in SCC-MCB via the Ethernet network.
- C. Wiring drawings for the SCADA 3000 module do not exist. System Supplier shall include time in the Bid to document all existing SCADA 3000 module wiring, including the power wiring, and preparation of an existing SCADA 3000 module wiring drawing. OWNER's personnel will be made available to assist with identifying existing wiring; however, it is ultimately the System Supplier's responsibility to identify the wiring. The existing wiring diagram shall be used as the basis for a demolition drawing showing the wiring to be removed as part of this project. The demolition drawing shall be submitted with the drawings for the proposed panels for shop drawing review.

3.09 RTU-7 (MAIN CONTROL BUILDING)

- A. OWNER will remove the existing SCADA 3000 module within this panel and provide wiring from this panel to SCC-MCB.
- B. System Supplier-provided wiring diagrams for inputs that pass through RTU-7 shall show terminations within RTU-7 and include wire numbers for OWNER's use in identifying wiring within RTU-7.
- C. Wiring drawings for the SCADA 3000 module do not exist. System Supplier shall not include time in the Bid to document the existing SCADA 3000 module wiring for this RTU.

3.10 RTU-8 MODIFICATIONS (SHB)

- A. This panel contains a CompactLogix L33ER PLC and a MicroLogix 1400 PLC. The SCADA alarms for the WWTP are handled by an alarm array in the CompactLogix L33ER PLC. Any new alarms added as part of this project to any PLC shall be integrated into this array. Alarms added to the array shall have the same functionality as the existing alarms and as described herein. New alarms shall be silenced/acknowledged using the existing array silence/acknowledge bit.
- B. The existing programming in the CompactLogix L33ER PLC shall be modified such that the networked PLC date and time set logic and the communication fail monitoring logic associated with the existing MTU PLC shall be used with the SCC-MCB PLC instead.

END OF SECTION

SECTION 26 09 10

CONTROLS AND INSTRUMENTATION DRAWINGS

PART 1-GENERAL

1.01 SUMMARY

- A. Work Included: Applicable provisions of Division 01 shall govern work in this section.

1.02 SUBMITTALS

- A. Submit drawings in accordance with provisions of Section 01 33 00–Submittals.

1.03 COORDINATION

- A. The requirements set forth in this section are intended to apply to the drawings provided as specified in Section 26 09 00–Controls and Instrumentation.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

3.01 GENERAL REQUIREMENTS

- A. A bound set of as-built drawings shall be provided in the associated equipment enclosure.
- B. All drawings shall have the following information:
 - 1. Project information, including name of OWNER and specific project name.
 - 2. Drawing title, accurately representing what is on the drawing.
 - 3. Unique drawing identifier, consisting of a unique drawing number or drawing number with individual sheet number. If sheet numbers are used, total number of sheets must be identified on each sheet.
 - 4. System Supplier company name, address, and phone number.
 - 5. Original design information, including person responsible for design, date of original design, person responsible for checking of design, and date of design check.
 - 6. Revision block indicating revision number, date, description of revision, and person responsible for revision.
- C. All drawings shall have line numbers that can be uniquely referenced from other drawings.
- D. All drawings showing wiring shall include unique wire numbers assigned to wiring that is installed between devices in the panel. The wire number shall be shown on the drawings.
- E. All drawings showing relays shall include reference to the drawings where the relay contacts are shown. Spare relay contacts that are not used shall be identified.

3.02 DRAWINGS REQUIRED

- A. Index of Drawings: Index of Drawings shall list drawing number, sheet number (if applicable), and drawing title for each drawing in drawing package.
- B. Symbol Sheet: Symbol Sheet shall include:
 - 1. Explanation of all symbols used on the drawings, including, but not limited to, normally open/normally closed contacts, flow switches, limit switches, pressure switches, selector switches, pushbuttons, timers, control relays, solenoids, fuses, circuit breakers, terminal blocks, and contactors. Symbol sheet does not need to be specific to project, but must contain explanation of all symbols used on the drawings (i.e., special symbols used for a particular project must be added to standard symbol sheets).
 - 2. List of abbreviations used on the drawings.
 - 3. Explanation of continuation method for circuits that cannot be shown on a single sheet.
- C. Exterior Enclosure Layout Drawing: Exterior layout drawing shall show location of all externally-mounted equipment. Exterior layout drawing shall include:
 - 1. Enclosure dimensions, enclosure NEMA rating (i.e., NEMA 1, NEMA 4X stainless steel, NEMA 4X nonmetallic, etc.), and enclosure color or finish.
 - 2. Location and actual depiction of panel latches, hinges, mounting holes and lifting eyes.
 - 3. Location and accurate representation of equipment mounted on enclosure (i.e., switches should look like actual switches being installed; indicating lights should look like actual lights being installed).
 - 4. Equipment nameplate location.
 - 5. Description for each piece of equipment or unique identifier and parts list, or bill of materials.
 - 6. Nameplate list including nameplate wording, size, construction (i.e., lamicoid with Black background and White letters), and mounting method (i.e., stainless steel screws). Label size must include size in inches or reference to standard sizes included on symbol sheet, or elsewhere in drawing package.
 - 7. Identification of area reserved for equipment located inside enclosure, but not actually mounted on enclosure back panel, such as UPSs, fiber optic patch panels, and lighting packages.
- D. Interior Enclosure Layout Drawing: Interior layout drawing shall show location of all internally-mounted equipment. Interior layout drawing shall include:
 - 1. Back panel dimensions and finish.
 - 2. Location and accurate representation of equipment (i.e., terminal blocks should look like actual terminal blocks; receptacle should look like actual receptacle, etc.).
 - 3. Dimensions of internally-mounted equipment are not necessary, but equipment should be drawn to scale such that an accurate representation of the way equipment will be mounted is shown on the drawing.
 - 4. Description for each piece of equipment or unique identifier and parts list, or bill of materials.
- E. Interconnection Diagram, Network Diagram or Block Diagram: Interconnection Diagram, Network Diagram or Block Diagram shall show all cabling between system components and identify any station addressing or node numbers that are assigned to equipment. All cables shall be identified by cable type, including specific manufacturer and model/part number.

Party responsible for furnishing and installing cable shall also be included. Some examples of cables that must be shown are:

1. Antenna cables.
2. Communications cables between system components (fiber and/or copper). This includes fiber optic jumpers between fiber patch panels and equipment, and Ethernet patch cables between switches and devices.
3. Communications cables (fiber and/or copper) between PLCs, controllers, operator interface equipment and security devices (e.g., card readers, electric strikes, and motion detectors) that are not shown on the elementary schematics.

F. Elementary Schematic: Elementary schematics shall be developed for each motor or supplied equipment and shall include:

1. Nominal voltage, AC or DC designation, number of phases (if AC), and frequency in hertz (if AC) for each source of electrical supply to the enclosure.
2. Prospective short-circuit current available at the point of electrical supply to the enclosure.
3. Type of power supply system grounding (e.g., wye phase midpoint grounded, delta phases corner grounded, wye phases midpoint grounded, delta phases ungrounded, etc.).
4. Complete documentation of electrical circuit from supply to motor or supplied equipment. Documentation shall include disconnecting means, main overcurrent protection (when supplied), branch overcurrent protection (when supplied), control circuit and special purpose control protection, motor control, overload protection, local disconnect (when supplied) and motor horsepower, and full load amps from nameplate or supplied equipment full load amps.
5. Documentation of PLC or controller inputs and outputs.
6. Documentation of all circuit breaker/motor protector ratings, fuse sizes, control power transformer VA ratings, dip switch settings, etc.
7. Documentation of all RVSS and VFD settings (e.g., under-voltage shutdown, ramp time, overload, excessive starts/hour, etc.) which have been changed from the factory default setting.

G. Wiring Diagram: Wiring diagrams shall show all terminations for all cables external to the enclosure. Terminations may be shown on the elementary schematics as long as the termination information is concise and easily understood by the personnel installing the field wiring. Termination information shall be shown for all devices, including devices that are not part of System Supplier's scope of supply. A box with two dots or continuation arrows indicating continuation to a piece of equipment are not acceptable. Information shown on System Supplier's wiring diagrams shall include a description of the drawings where terminations are found (i.e., drawing title), drawing number where the terminations are found, and terminal blocks referenced on the drawing. System Supplier shall coordinate with supplier of other wiring diagram to provide information on System Supplier's wiring diagrams.

H. Calculations Summary: Calculations summary shall include calculations performed to determine the size of the UPS.

I. Functional Testing Recommendations: Testing recommendations shall include description of functional tests that must be performed by operators. Functional test description shall be included for UPS, indicating lights, and other devices whose condition can only be determined by testing.

3.03 SAMPLE DRAWINGS

- A. Sample drawings showing an acceptable format are included in the appendix. The samples included in the appendix do not represent the only acceptable method of showing the required information.

END OF SECTION

SECTION 26 09 90
SCADA SYSTEM I/O LISTING

STRAND ASSOCIATES, INC.®
VILLAGE OF ADDISON
ADDISON, ILLINOIS
NORTH WWTP SCADA IMPROVEMENTS
CONTRACT 24-1-1
SCADA SYSTEM DEMOLITION I/O LISTING - MTU PANEL DEMOLITION

SCC	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
MTU	CL2 LEAK DETECTED		1	0	0	0	2~#14	DEMO
MTU	RETURN SLUDGE STATION HIGH LEVEL		1	0	0	0	2~#14	DEMO
MTU	CLARIFIER FAIL		1	0	0	0	2~#14	DEMO
MTU	RSPS ALARM PANEL		1	0	0	0	2~#14	DEMO
MTU	METHAN LEAK DETECTED		1	0	0	0	2~#14	DEMO
MTU	INTERMEDIATE PUMP STATION HIGH LEVEL		1	0	0	0	2~#14	DEMO
MTU	EXCESS FLOW PUMP STATION FAIL		1	0	0	0	2~#14	DEMO
MTU	FIRST FLUSH TANK FULL		1	0	0	0	2~#14	DEMO
MTU	EXCESS FLOW DISCHARGING		1	0	0	0	4/C.	DEMO
MTU	RSPS DRY WELL HIGH LEVEL		1	0	0	0		DEMO
MTU	STB SUMP ALARM		1	0	0	0		DEMO
MTU	SO2 LEAK DETECTED		1	0	0	0		DEMO
MTU	AIR COMPRESSOR FAIL		1	0	0	0	4/C.	DEMO
MTU	SECONDARY BLOWER FAIL		1	0	0	0		DEMO
MTU	NPW SYSTEM FAIL		1	0	0	0		DEMO
MTU	EXCESS FLOW TANK LEVEL		0	0	1	0	SH. PR.	DEMO
MTU	REMOTE I/O FROM RSPS PC I/O RACK		X	0	X	0	4/C.	DEMO
MTU	REMOTE I/O FROM RTU-7		X	0	X	0	4/C.	DEMO
MTU	UNKNOWN MICROLOGIX 1400 SIGNAL		1	0	0	0	2~#14	DEMO
MTU	UNKNOWN MICROLOGIX 1400 SIGNAL		1	0	0	0	2~#14	DEMO
MTU	UNKNOWN MICROLOGIX 1400 SIGNAL		0	1	0	0	2~#14	DEMO
	TOTALS		17	1	1	0		

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NORTH WWTP SCADA IMPROVEMENTS
CONTRACT 24-1-1
SCADA SYSTEM I/O LISTING - SUPERVISORY CONTROL CENTER MCB (SCC-MCB)

SCC	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
MCB	REMOTE I/O FROM RIO-CL2	RIO-CL2	X	0	X	0	ENET	ALL SIGNALS FROM RIO-CL2
MCB	CONTROL POWER FAIL		1	0	0	0	2~#14	FROM CONTROL POWER FAIL RELAY IN THIS SCC
MCB	UPS DC BUS OK		1	0	0	0	2~#14	FROM UPS IN THIS SCC
MCB	UPS BATTERY FAIL		1	0	0	0	2~#14	FROM UPS IN THIS SCC
MCB	UPS BATTERY DISCHARGED		1	0	0	0	2~#14	FROM UPS IN THIS SCC
MCB	NETWORK SWITCH ALARM		1	0	0	0	2~#14	FROM NETWORK SWITCH IN THIS SCC
MCB	BACKUP HARDWIRED ALARM DIALER		0	4	0	0	8~#14	TO BACKUP HARDWIRED ALARM DIALER IN THIS SCC
MCB	FIRST FLUSH TANK FULL		1	0	0	0	BY OWNER	FROM FLOAT SWITCH VIA RTU-7
MCB	EXCESS FLOW DISCHARGING		1	0	0	0	BY OWNER	FROM FLOW SWITCH VIA RELAY IN RTU-7
MCB	EXCESS FLOW GATE OPEN		1	0	0	0	BY OWNER	FROM GATE LIMIT SWITCH VIA RELAY IN RTU-7
MCB	EXCESS FLOW TANK LEVEL		0	0	1	0	SH. PR.	FROM LEVEL TRANSMITTER MOUNTED ABOVE MTU PANEL
	TOTALS		8	4	1	0		

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CONTRACT 24-1-1
SCADA SYSTEM DEMOLITION I/O LISTING - RSPS PC I/O RACK DEMOLITION

RTU	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
RSPS	MAIN WET WELL-WEST LEVEL		0	0	1	0	SH. PR.	DEMO
RSPS	MAIN WET WELL-EAST LEVEL		0	0	1	0	SH. PR.	DEMO
RSPS	RAW FLOW INSTANTANEOUS		0	0	1	0	SH. PR.	DEMO
RSPS	EXCESS FLOW WETWELL LEVEL		0	0	1	0	SH. PR.	DEMO
RSPS	RAW PUMP #1 RUNNING		1	0	0	0	#14	DEMO
RSPS	RAW PUMP #2 RUNNING		1	0	0	0	4/C.	DEMO
RSPS	RAW PUMP #3 RUNNING		1	0	0	0		DEMO
RSPS	RAW PUMP #4 RUNNING		1	0	0	0		DEMO
RSPS	BAR SCREEN #1 FAULT		1	0	0	0	4/C.	DEMO
RSPS	BAR SCREEN #2 FAULT		1	0	0	0		DEMO
RSPS	BAR SCREEN #1 RUNNING		1	0	0	0		DEMO
RSPS	BAR SCREEN #2 RUNNING		1	0	0	0		DEMO
RSPS	CONVEYOR FAULT		1	0	0	0	SH. PR.	DEMO
RSPS	EXCESS FLOW FAULT		1	0	0	0	SH. PR.	DEMO
RSPS	RSPS SUMP FAIL		1	0	0	0	SH. PR.	DEMO
RSPS	RSPS ALARM PANEL GENERAL ALARM		1	0	0	0	SH. PR.	DEMO
RSPS	REMOTE I/O FROM STB PC I/O RACK		X	0	X	0	4/C.	DEMO
RSPS	REMOTE I/O TO MTU PANEL		0	X	0	X	4/C.	DEMO
	TOTALS		12	0	2	0		

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NORTH WWTP SCADA IMPROVEMENTS
CONTRACT 24-1-

SCADA SYSTEM I/O LISTING - EFFLUENT PROGRAMMABLE LOGIC CONTROLLER PANEL (PLC-EF) ADDITIONS

RTU	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
PLC-EF	REMOTE I/O FROM RIO-STB	RIO-STB	X	0	X	0	ENET	ALL SIGNALS FROM RIO-STB
PLC-EF	RAW FLOW INSTANTANEOUS		0	0	1	0	SH. PR.	FROM FLOW METER TRANSMITTER
PLC-EF	MAIN WET WELL-WEST LEVEL		0	0	1	0	SH. PR.	FROM LEVEL TRANSMITTER VIA US FILTER PANEL
PLC-EF	MAIN WET WELL-EAST LEVEL		0	0	1	0	SH. PR.	FROM LEVEL TRANSMITTER VIA US FILTER PANEL
PLC-EF	RAW PUMP #1 RUNNING		1	0	0	0	2~#14	FROM VFD IN MCC-3
PLC-EF	RAW PUMP #2 RUNNING		1	0	0	0	2~#14	FROM VFD IN MCC-3
PLC-EF	RAW PUMP #3 RUNNING		1	0	0	0	2~#14	FROM VFD IN MCC-3
PLC-EF	RAW PUMP #4 RUNNING		1	0	0	0	2~#14	FROM VFD IN MCC-3
PLC-EF	PRIMARY CLARIFIER #1 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN MCC-3 STARTER BUCKET
PLC-EF	PRIMARY CLARIFIER #2 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN MCC-3 STARTER BUCKET
PLC-EF	PRIMARY CLARIFIER #3 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN MCC-3 STARTER BUCKET
PLC-EF	RSPS SUMP FAIL		1	0	0	0	2~#14	FROM SUMP CONTROL PANEL
PLC-EF	RSPS ALARM PANEL GENERAL ALARM		1	0	0	0	2~#14	FROM ALARM PANEL
PLC-EF	GAS DETECTOR #1		1	0	0	0	FUTURE	FROM GAS DETECTION TRANSMITTER
PLC-EF	GAS DETECTOR #2		1	0	0	0	FUTURE	FROM GAS DETECTION TRANSMITTER
	TOTALS		11	0	3	0		

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NORTH WWTP SCADA IMPROVEMENTS
CONTRACT 24-1-1
SCADA SYSTEM DEMOLITION I/O LISTING - STB PC I/O RACK DEMOLITION

RTU	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
STB	INTERMEDIATE RAS FLOW		0	0	1	0	SH. PR.	DEMO
STB	FINAL RAS FLOW		0	0	1	0	SH. PR.	DEMO
STB	CLARIFIER FAIL		1	0	0	0	SH. PR.	DEMO
STB	FINAL WAS FLOW		0	0	1	0	SH. PR.	DEMO
STB	NPW SYSTEM FLOW		0	0	1	0	SH. PR.	DEMO
STB	NPW SYSTEM PSI		0	0	1	0	SH. PR.	DEMO
STB	INTERMEDIATE SCREW PUMP FAIL		1	0	0	0	SH. PR.	DEMO
STB	INTERMEDIATE RETURN SLUDGE FAIL		1	0	0	0	SH. PR.	DEMO
STB	MAIN POWER GRID ON		1	0	0	0	4/C.	DEMO
STB	STAND-BY POWER GRID ON		1	0	0	0		DEMO
STB	POWER SOURCE FAIL		1	0	0	0		DEMO
STB	NPW SYSTEM SUCTION LEVEL		1	0	0	0	SH. PR.	DEMO
STB	NPW SYSTEM BYPASS VALVE OPEN		1	0	0	0	4/C.	DEMO
STB	SPW SYSTEM FILTER FLUSHING		1	0	0	0		DEMO
STB	REMOTE I/O TO RSPS PC I/O RACK		0	X	0	X	4/C.	DEMO
	TOTALS		9	0	5	0		

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CONTRACT 24-1-1
SCADA SYSTEM I/O LISTING - REMOTE I/O PANEL STB (RIO-STB)

RIO	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
STB	CONTROL POWER FAIL		1	0	0	0	2~#14	FROM CONTROL POWER FAIL RELAY IN THIS RIO PANEL
STB	UPS DC BUS OK		1	0	0	0	2~#14	FROM UPS IN THIS RIO PANEL
STB	UPS BATTERY FAIL		1	0	0	0	2~#14	FROM UPS IN THIS RIO PANEL
STB	UPS BATTERY DISCHARGED		1	0	0	0	2~#14	FROM UPS IN THIS RIO PANEL
STB	NETWORK SWITCH ALARM		1	0	0	0	2~#14	FROM NETWORK SWITCH IN THIS RIO PANEL
STB	INTERMEDIATE RAS FLOW INSTANTANEOUS		0	0	1	0	SH. PR.	FROM FLOW METER TRANSMITTER
STB	FINAL RAS FLOW INSTANTANEOUS		0	0	1	0	SH. PR.	FROM FLOW METER TRANSMITTER
STB	INTERMEDIATE SCREW HIGH LEVEL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	FINAL SCREW HIGH LEVEL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	INTERMEDIATE CLARIFIER #1 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	INTERMEDIATE CLARIFIER #2 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	INTERMEDIATE CLARIFIER #3 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	FINAL CLARIFIER #1 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	FINAL CLARIFIER #2 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	FINAL CLARIFIER #3 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	FINAL CLARIFIER #4 FAIL		1	0	0	0	2~#14	FROM NEW RELAY IN THIS RIO PANEL
STB	STB SUMP FAIL		1	0	0	0	2~#14	FROM SUMP CONTROL PANEL
STB	AERATION BLOWER FAIL		1	0	0	0	2~#14	FROM BLOWER CONTROL PANEL
	TOTALS		16	0	2	0		

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CONTRACT 24-1-1
SCADA SYSTEM DEMOLITION I/O LISTING - REMOTE TERMINAL UNIT 5 (RTU-5) DEMOLITION

RTU	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
5	SECONDARY EFFLUENT FLOW		0	0	1	0	SH. PR.	DEMO
5	EXCESS (A01) FLOW		0	0	1	0	SH. PR.	DEMO
5	CL2 FLOW		1	0	0	0	SH. PR.	DEMO
5	DEGRITOR RUNNING		1	0	0	0	8/C.	DEMO
5	DEGRITOR FAULT		1	0	0	0		DEMO
5	MAIN GATE LOCAL/REMOTE		1	0	0	0		DEMO
5	UNUSED REMOTE I/O		0	0	1	0	4/C.	DEMO
	TOTALS		4	0	3	0		

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CONTRACT 24-1-1
SCADA SYSTEM I/O LISTING - REMOTE I/O PANEL CL2 (RIO-CL2)

RIO	EQUIPMENT NAME	NUMBER	DI	DO	AI	AO	WIRE	COMMENTS
CL2	CONTROL POWER FAIL		1	0	0	0	2~#14	FROM CONTROL POWER FAIL RELAY IN THIS RIO PANEL
CL2	UPS DC BUS OK		1	0	0	0	2~#14	FROM UPS IN THIS RIO PANEL
CL2	UPS BATTERY FAIL		1	0	0	0	2~#14	FROM UPS IN THIS RIO PANEL
CL2	UPS BATTERY DISCHARGED		1	0	0	0	2~#14	FROM UPS IN THIS RIO PANEL
CL2	NETWORK SWITCH ALARM		1	0	0	0	2~#14	FROM NETWORK SWITCH IN THIS RIO PANEL
CL2	SECONDARY EFFLUENT FLOW INSTANTANEOUS		0	0	1	0	SH. PR.	FROM FLOW METER TRANSMITTER
CL2	EXCESS (A01) FLOW INSTANTANEOUS		0	0	1	0	SH. PR.	FROM FLOW METER TRANSMITTER
CL2	CL2 LEAK		1	0	0	0	2~#14	FROM LEAK DETECTOR
CL2	SO2 LEAK		1	0	0	0	FUTURE	FROM LEAK DETECTOR
	TOTALS		7	0	2	0		

SECTION 32 92 00

RESTORATION

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Placement of topsoil.
 - 2. Seeding.
 - 3. Fertilizer.
 - 4. Mulching.
 - 5. Maintenance.
- B. All areas disturbed by construction or storage of materials or equipment shall be restored.
- C. Related Sections and Divisions: Applicable provisions of Division 01 shall govern work in this section.
- D. Payment: Payment for restoration shall be at the Lump Sum Price Bid. Costs for topsoiling, seeding, fertilizer, mulching, and maintenance of restored areas shall be included in the lump sum price bid. One percent of the total Contract price shall be retained following project completion until a uniform 2-inch growth of vegetation is established over all restored areas.

1.02 REFERENCES

- A. Standard Specifications: Unless otherwise indicated, Standard Specifications shall refer to the State of Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, current edition, including all issued supplemental specifications.

1.03 QUALITY ASSURANCE

- A. All work shall be in accordance with Standard Specifications, unless noted otherwise.

PART 2—PRODUCTS

2.01 TOPSOIL

- A. Topsoil: Fertile, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, stones greater than 3/4 inch in size, clay or impurities, plants, weeds and roots; pH value of minimum 5.4 and maximum 7.0.
- B. Topsoil from the site may be used if it meets the above requirements.

2.02 SEED

- A. Seed mixture shall be Class 2 per Article 250.07.

2.03 FERTILIZER

- A. Fertilizer shall be as specified in Article 250.

PART 3—EXECUTION

3.01 TOPSOIL

- A. Placing topsoil shall be in accordance with Article 211 of the Standard Specifications. Topsoil shall be placed to a uniform depth of 6 inches in place. Topsoil placement shall be incidental to sodding or seed, fertilizer, and mulching.

3.02 SEEDING

- A. Seeding shall be performed in accordance with Article 250 of the Standard Specifications.
- B. Seed shall be applied at the rates specified in Article 250 of the Standard Specifications.

3.03 FERTILIZER

- A. Fertilizer shall be applied per Article 250 of the Standard Specifications.

3.04 MULCHING

- A. All areas receiving seed shall be mulched.
- B. Mulching shall be performed in accordance with Method 2, Procedure 1 of Article 251 of the Standard Specifications.

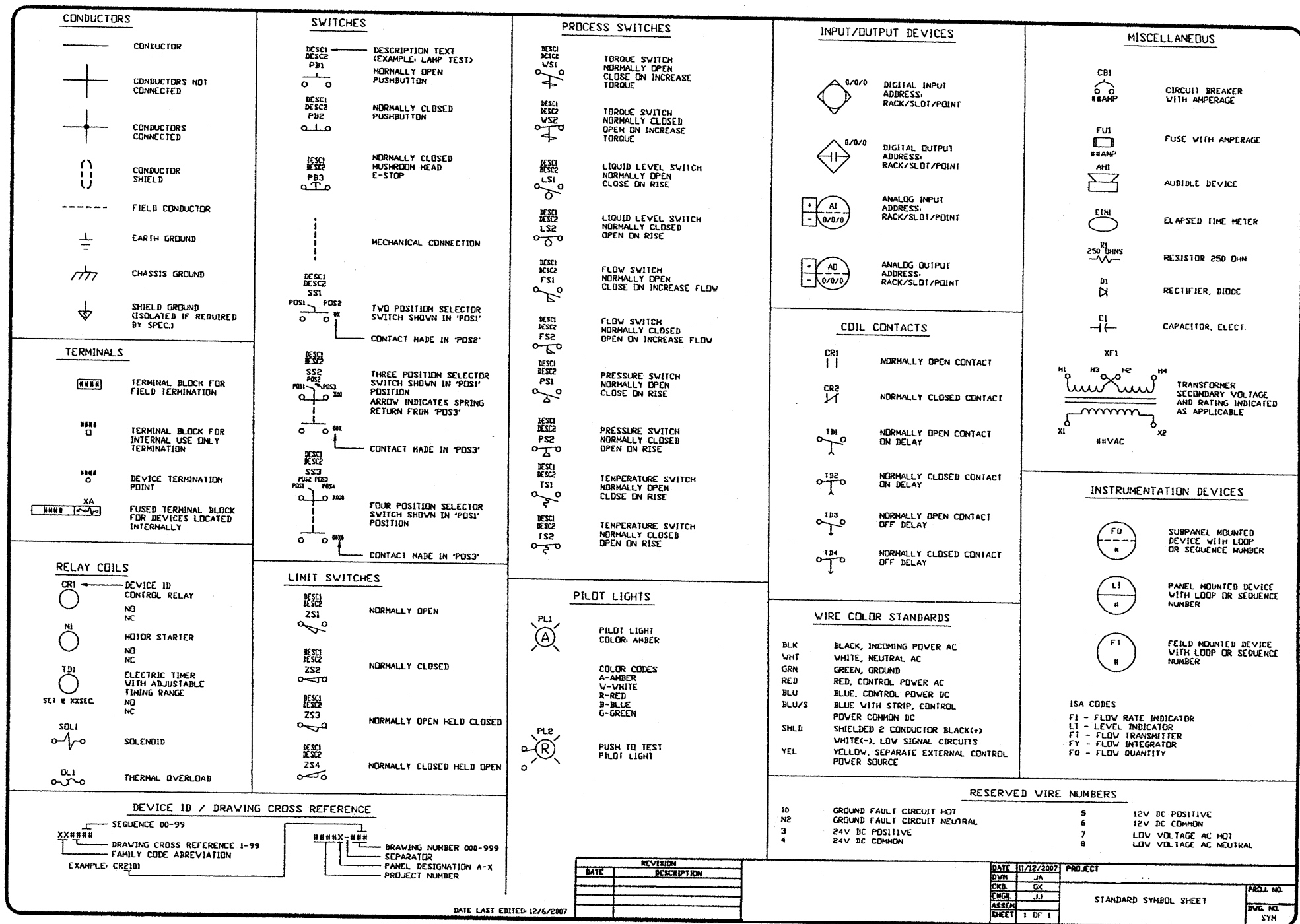
3.05 MAINTENANCE

- A. Seeding shall proceed concurrently with construction. Seeding shall be maintained by CONTRACTOR until grass is well established. Grass is well established when it covers the entire seeded areas to a height of 2 inches.
- B. Immediately remove clippings after mowing.
- C. Water to prevent seed/sod and soil from drying out.
- D. Roll surface to remove minor depressions or irregularities.
- E. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.
- F. Immediately reseed areas which fail to show adequate catch. Bare spots shall not exceed 5 square feet in area and not exceed 3% of the total seeded areas.
- G. Protect seeded areas with warning signs during maintenance period.

- H. Correct damage resulting from erosion, gullies, rills, or other causes by filling with topsoil, tamping, refertilizing, and reseeding if damage occurs prior to acceptance of work.

END OF SECTION

SAMPLE DRAWINGS



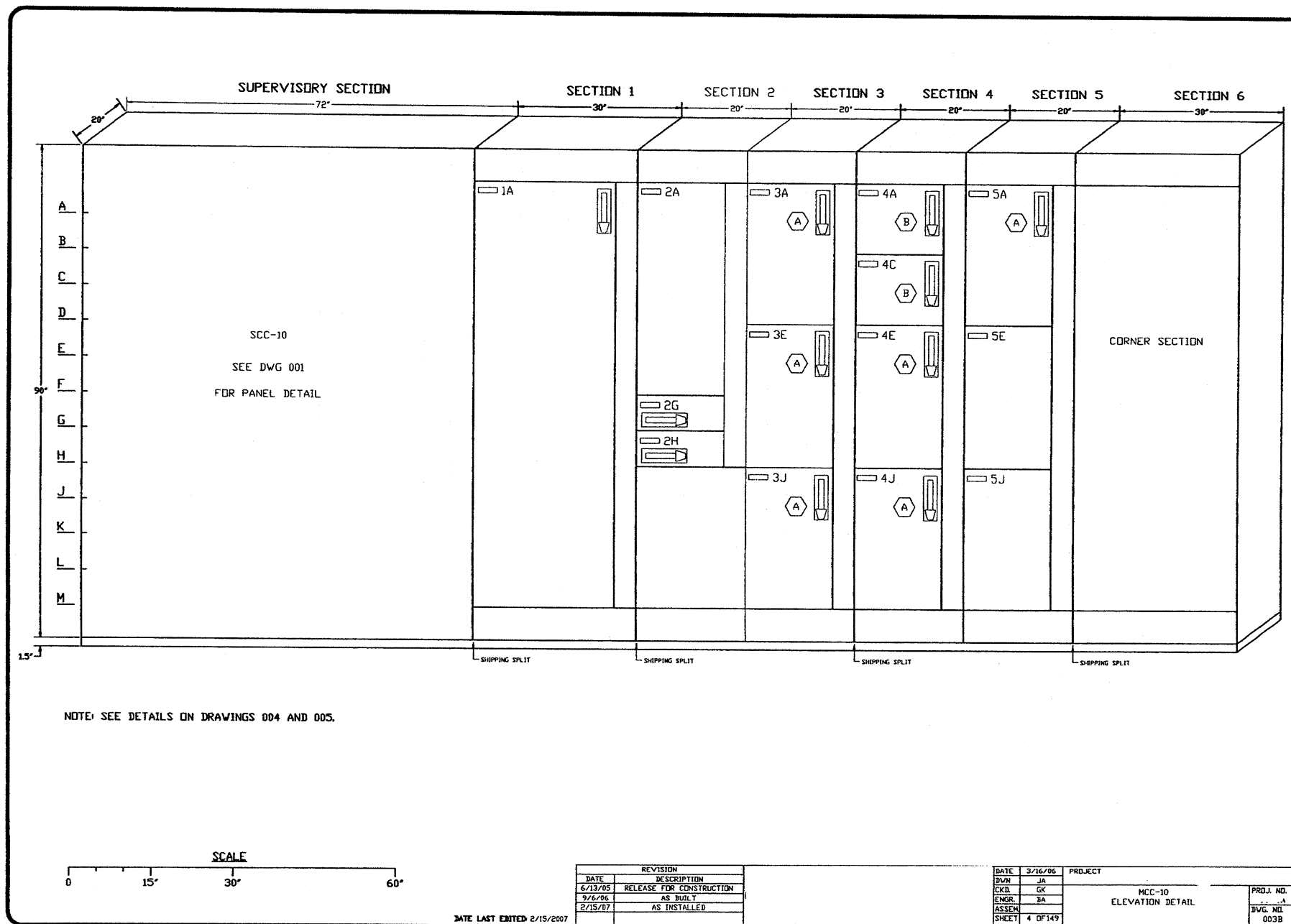
DATE LAST EDITED: 12/6/2007

Sample Symbol sheet

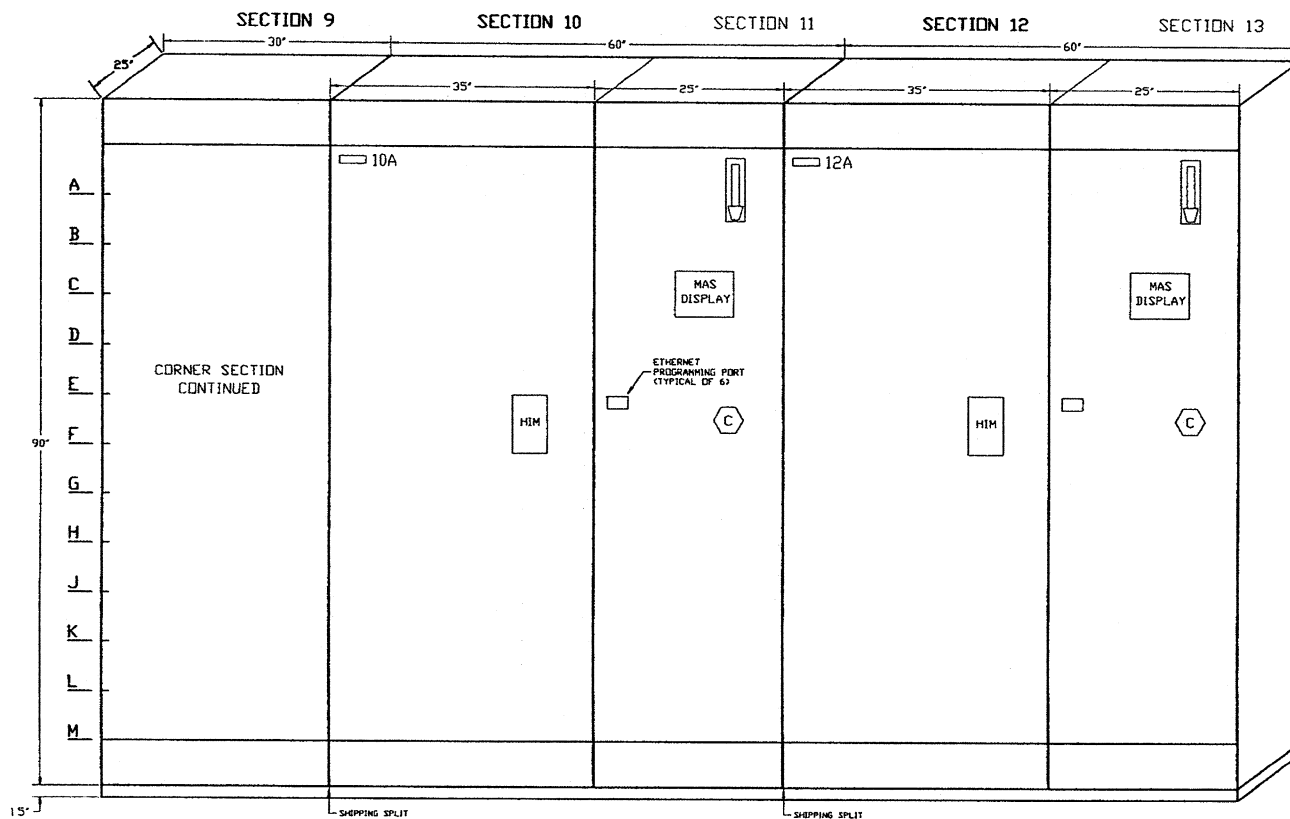
Standard Abbreviations

<u>Abbreviation</u>	<u>Description</u>	<u>Abbreviation</u>	<u>Description</u>
A	Air Compressed	OV	Overvoltage
AC	Air Condition	PB	Pushbutton
AD	Auto Dialer	PC	Pull Cord
AH	Alarm Horn	PC	Personal Computer
AL	Alarm Light	PFC	Power Factor Capacitor
AM	Amp Meter/Ammeter	PL	Pilot Light
ANN	Annunciator	PLC	Programmable Logic Controller
AR	Alternating Relay	PM	Power or Phase Monitor
AWG	American Wire Gauge	PN	Pneumatic
BA	Battery	PR	Pressure Regulator
BLU	Blue	PS	Pressure Switch
BRN	Brown	PS	Power Supply
CA	Cable	PSH	Pressure Switch High
CB	Circuit Breaker	PSL	Pressure Switch Low
CR	Control Relay	REC	Receptacle
CT	Current Transformer	SP	Surge Protector
DB	Distribution Block	SS	Selector Switch
DI	Diode	STP	Shielded Twisted Pair
DS	Disconnect Switch	SV	Solenoid Valve
EC	Electronic Control Device	TD	Time Delay Relay
ETM	Elapsed Time Meter	TG	Toggle Switch
EN	Enclosure	TS	Temperature Switch
FO	Fiber Optic	TSP	Twisted Shielded Pair
FS	Flow Switch	TT	Temperature Transmitter
FU	Fuse	UPS	Uninterruptible Power Supply
GFI	Ground Fault Interrupter	UTP	Unshielded Twisted Pair
GND	Ground	VA	Voltampere
GRN	Green	VFD	Variable
HTR	Heater	VM	Voltmeter
LA	Lightning Arrestor	WHT	White
LP	Lighting Panel	WS	Weight Switch
LR	Latching Relay	WT	Weight Transmitter
LS	Level Switch	XFMR	Transformer
MS	Motor Starter Contactor	SI	Signal Isolator
M	Motor	SS	Speed Switch
NP	Nameplate	ZS	Position Switch
OIT	Operator Interface Terminal		
OL or O/L	Overload		
ORG	Orange		

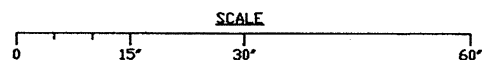
Sample List of
Abbreviations



Sample Exterior
Layout Drawing



NOTE: SEE DETAILS ON DRAWINGS 004 AND 005.
 SECTIONS 10 THROUGH 13 ARE MOUNTED BACK-TO-BACK
 WITH SECTIONS 14 THROUGH 17.



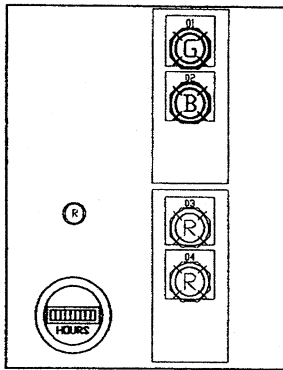
DATE LAST EDITED 2/15/2007

REVISION	
DATE	DESCRIPTION
6/13/05	RELEASE FOR CONSTRUCTION
9/6/06	AS BUILT
2/15/07	AS INSTALLED

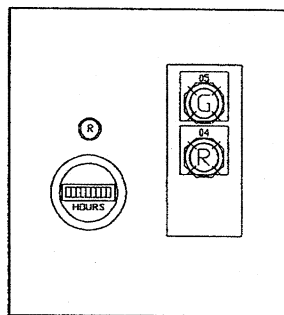
DATE	3/16/06	PROJECT	
DWN	JA		
CKD	GK	MCC-10	PROJ. NO.
ENGR	BA	ELEVATION DETAIL	
ASSEN			DWG. NO.
SHEET	6 OF 149		003D

Sample Exterior
 Layout Drawing

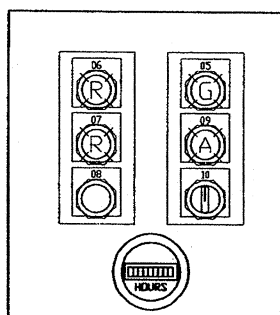
A DETAIL



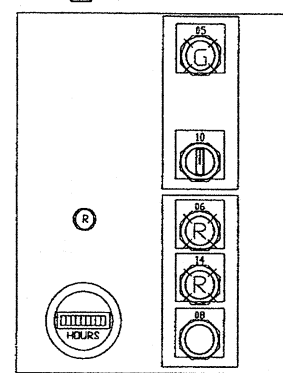
B DETAIL



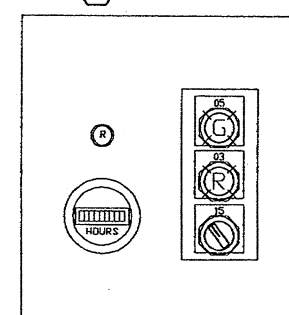
C DETAIL



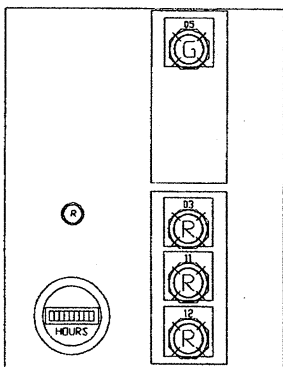
G DETAIL



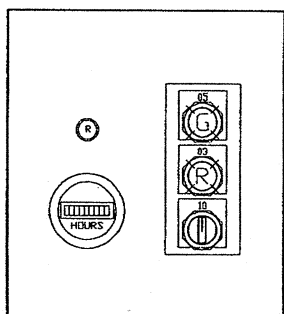
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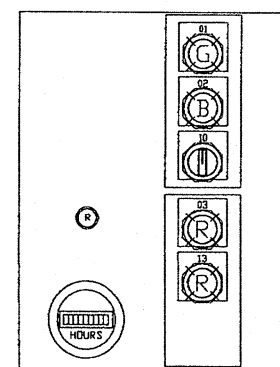
D DETAIL



E DETAIL

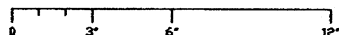


F DETAIL



LEGEND PLATE SCHEDULE					
TAG	DESC1	DESC2	DESC3	SIZE	REMARKS
01	FORWARD			1-13/16" SQ	
02	REVERSE			1-13/16" SQ	
03	OVERLOAD			1-13/16" SQ	
04	OVERCURRENT			1-13/16" SQ	
05	RUN			1-13/16" SQ	
06	VFD FAULT			1-13/16" SQ	
07	MOTOR/BEARING	HIGH TEMP		1-13/16" SQ	
08	RESET			1-13/16" SQ	
09	JBOX/MOTOR	MOISTURE		1-13/16" SQ	
10	HAND	AUTO	OFF	1-13/16" SQ	
11	ZERO SPEED	ALARM		1-13/16" SQ	
12	ESTOP	ACTIVATED		1-13/16" SQ	
13	INSPECTION	DOOR OPEN		1-13/16" SQ	
14	MOTOR	DIVERTEMP		1-13/16" SQ	
15	OFF	ON		1-13/16" SQ	

SCALE



DATE LAST EDITED 2/15/2007

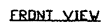
REVISION	
DATE	DESCRIPTION
6/13/05	RELEASE FOR CONSTRUCTION
9/6/06	AS BUILT
2/15/07	AS INSTALLED

DATE	3/16/06	PROJECT	
DWN	JA		
CKD	CK		
ENGR	BA		
ASSEM			
SHEET	11 OF 149		

MCC-10
BUCKET DETAILS

PROJ. NO.
DWG. NO.
004

Sample Exterior
Layout Drawing



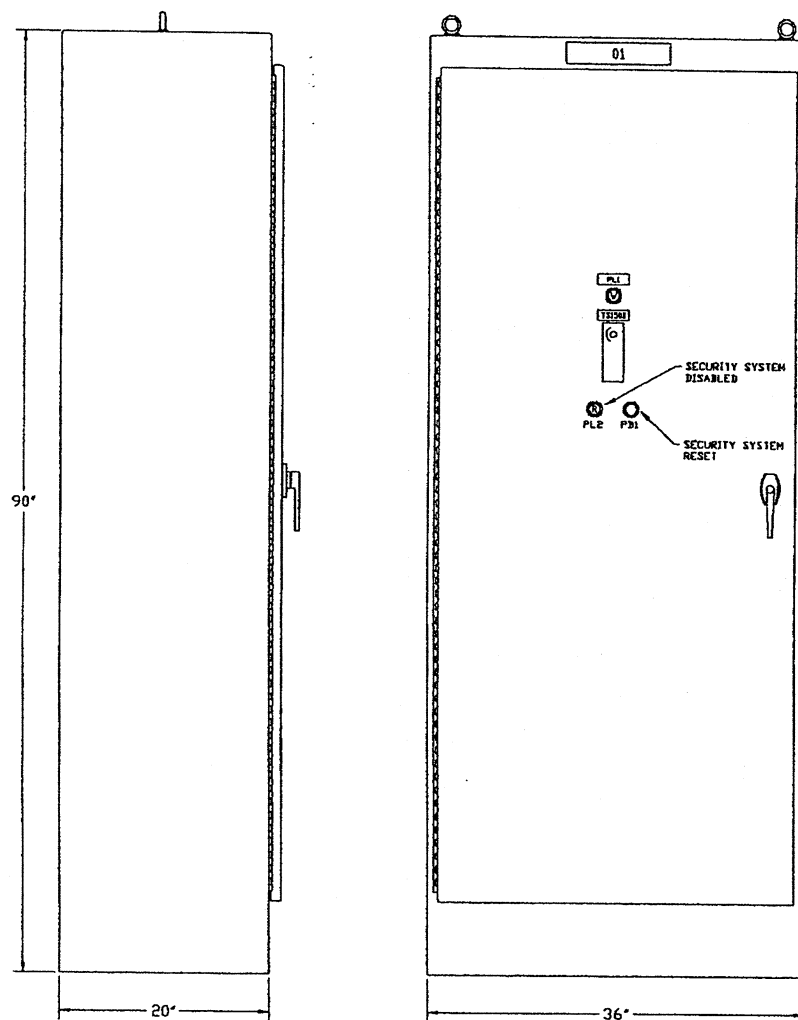
NAME PLATES ARE BLACK WITH WHITE LETTERS

1 ENCLOSURE IS A NEMA TYPE 12 FREESTANDING HOFFMAN A-9072201 SD
WITH INNER PANEL HOFFMAN A-90P72F1
2 FINISH IS ANSI 61 GRAY
3 QTY # BF-3171536



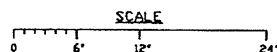
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BWN	JA		
CKD	GK		
ENGR	BA	SEC-10	PROJ. NO.
ASSEM		ENCLOSURE DETAIL	
SHEET	1 OF 149		DWG. NO. 001

Sample Exterior Layout Drawing



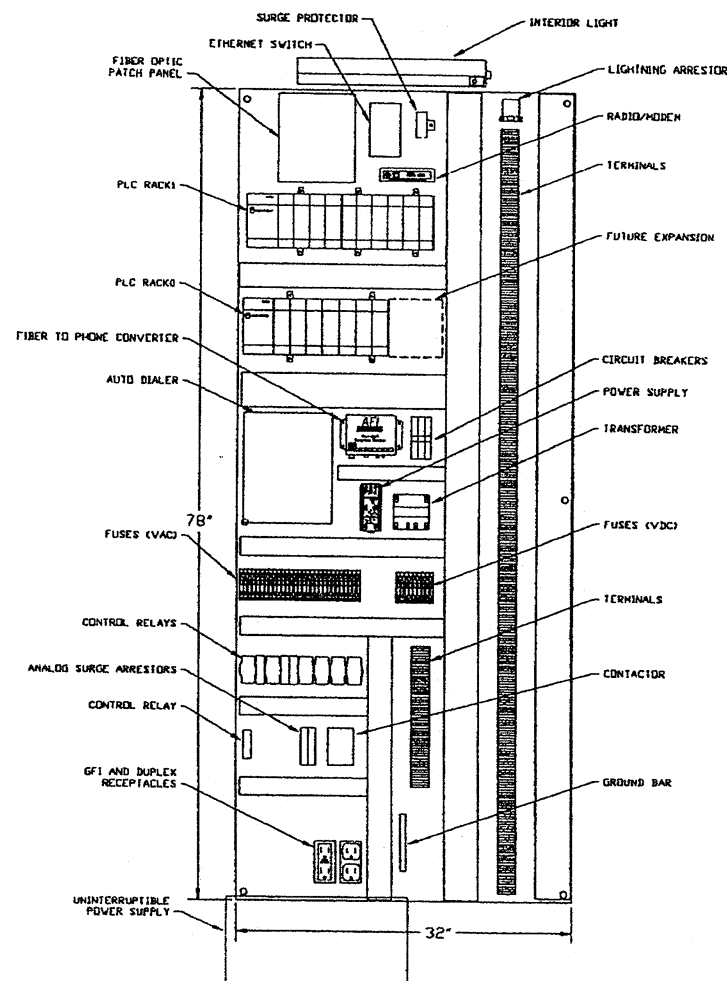
NOTES:

- ENCLOSURE IS A NEMA TYPE 12 FREESTANDING HOFFMAN A903620FS, WITH INNER PANEL HOFFMAN A90P36FL.
- FINISH IS ANSI 61 GRAY.
- UL 508A



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REVISION	
DATE	DESCRIPTION



PANEL LAYOUT

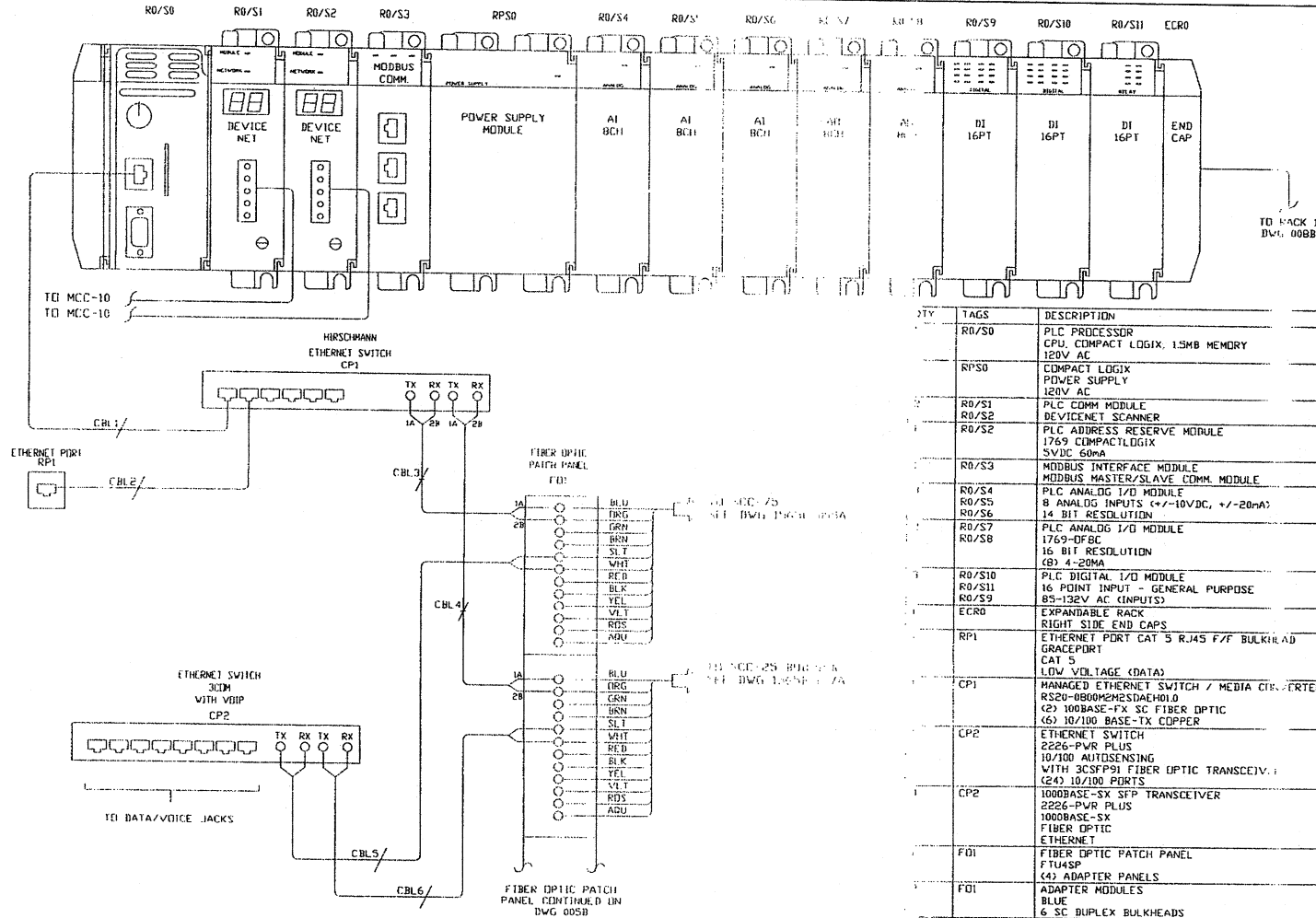
NAMEPLATE SCHEDULE					
TAG	LINE 1	LINE 2	LINE 3	SIZE	REMARKS
01	SCC-MAIN			2x10	
PL1	POWER ON UPS			1x3	
TS1580	LOW BUILDING TEMPERATURE			1x3	

NAMEPLATES ARE BLACK WITH WHITE LETTERS

DATE	11/12/2007	PROJECT	SCC-MAIN	PROJ. NO.
DWN	JA		ENCLOSURE DETAIL	
CKD	GK			
ENGR	JJ			
ASSEM				
SHEET	1 OF 34			DWG. NO. 001

Sample Exterior and Interior Layout Drawing

COMPACT LOGIX I/O SCHEDULE



QTY	TAGS	DESCRIPTION	MFG	CATALOG
1	R0/S0	PLC PROCESSOR CPU, COMPACT LOGIX, 15MB MEMORY 120V AC	ALLEN BRADLEY	1769-L3SE
1	RPS0	COMPACT LOGIX POWER SUPPLY 120V AC	ALLEN BRADLEY	1769-PA4
1	R0/S1	PLC COMM MODULE DEVICENET SCANNER	ALLEN BRADLEY	1769-SDN
1	R0/S2	PLC ADDRESS RESERVE MODULE 1769 COMPACTLOGIX 5VDC 60MA	ALLEN BRADLEY	1769-ARM
1	R0/S3	MODBUS INTERFACE MODULE MODBUS MASTER/SLAVE COMM. MODULE	PROSOFT	MV169-MCM
1	R0/S4	PLC ANALOG I/O MODULE 8 ANALOG INPUTS (+/-10VDC, +/-20mA)	ALLEN BRADLEY	1769-IFB
1	R0/S5	PLC ANALOG I/O MODULE 1769-OFBC 16 BIT RESOLUTION 0.4-20MA	ALLEN BRADLEY	1769-OFBC
1	R0/S6	PLC ANALOG I/O MODULE 16 POINT INPUT - GENERAL PURPOSE 0.5-120V AC (INPUTS)	ALLEN BRADLEY	1769-IA16
1	R0/S7	EXPANDABLE RACK RIGHT SIDE END CAPS	ALLEN BRADLEY	1769-CRRI
1	RP1	ETHERNET PORT CAT 5 RJ45 F/F BULKHEAD GRACEPORT CAT 5 10/100 VOLTAGE (DATA)	GRACE ENG PRODUCTS	P-R2-B3
1	CP1	MANAGED ETHERNET SWITCH / MEDIA CONVERTER RS20-0800M2MSDAEH010 (2) 100BASE-TX SC FIBER OPTIC (6) 10/100 BASE-TX COPPER	HIRSCHMANN	943 434-003
1	CP2	ETHERNET SWITCH 2226-PWR PLUS 10/100 AUTOSENSING WITH 3CSFP91 FIBER OPTIC TRANSCEIVER (24) 10/100 PORTS	3COM	3C16490-US
1	CP2	1000BASE-SX SFP TRANSCEIVER 2226-PWR PLUS 1000BASE-SX FIBER OPTIC ETHERNET	3COM	3CSFP91
1	FO1	FIBER OPTIC PATCH PANEL FTU4SP (4) ADAPTER PANELS	HUBBELL	FTU4SP
1	FO1	ADAPTER MODULES BLUE 6 SC DUPLEX BULKHEADS	HUBBELL	FSPSCN6
1	CBL1	UTP PATCH CABLE PCXSEB03 CAT 5E RJ45	HUBBELL	PCXSEB03
1	CBL3	FIBER OPTIC PATCH CABLE 1 METER (1 PAIR) (2) FIBERS SC MM 62.5	HUBBELL	DFPCSCSC1MM
1	CBL4	FIBER OPTIC PATCH CABLE 2 METER (1 PAIR) (2) FIBERS SC-LC MM 62.5	HUBBELL	DFPCLSCC2MM

DATE	REVISION
11/16/05	RELEASE FOR DISTRIBUTION
11/16/05	ASSEMBLED
11/16/05	ASSEMBLED

DATE LAST EDITED 11/16/2007

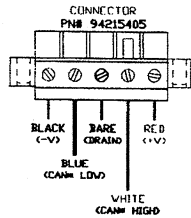
DATE	3/7/06	PROJECT
DWN	A	
CKD	K	SCC-10
ENGR	AS	PLC I/O SCHEDULE
ASSEM		
SHEET	17 OF 149	

PRJ NO.	
DWG NO.	008A

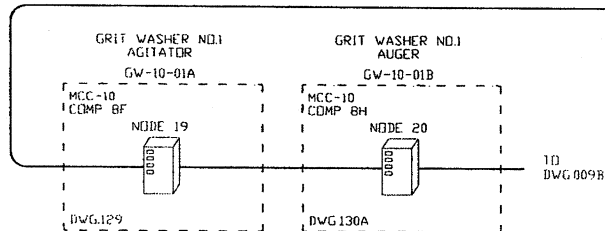
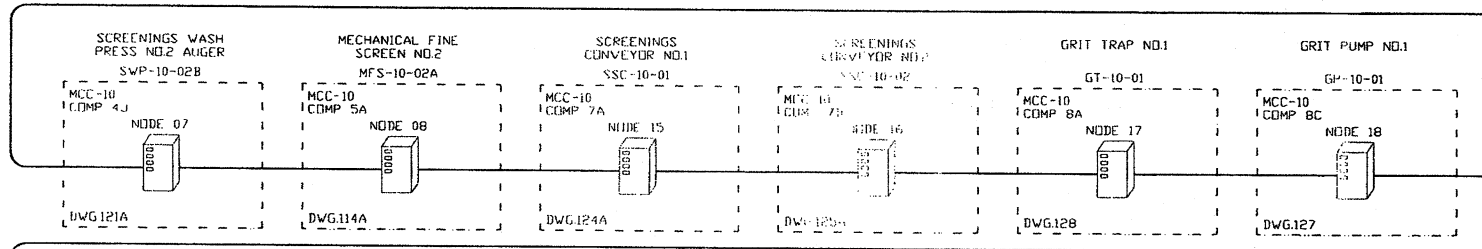
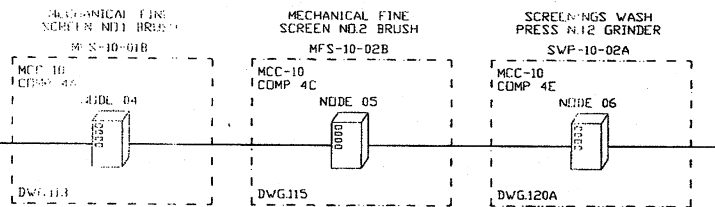
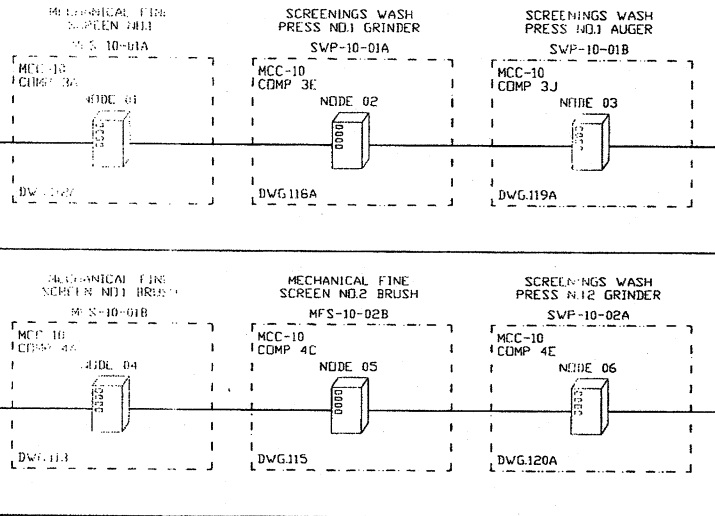
Sample Interconnection
Diagram

DEVICENET CONNECTOR DETAIL

NOTES:
1. CAN+ = CONTROLLER AREA NETWORK



SEE DEVICENET
CONNECTION DETAIL



* 120 OHM TERMINATING
RESISTOR REQUIRED

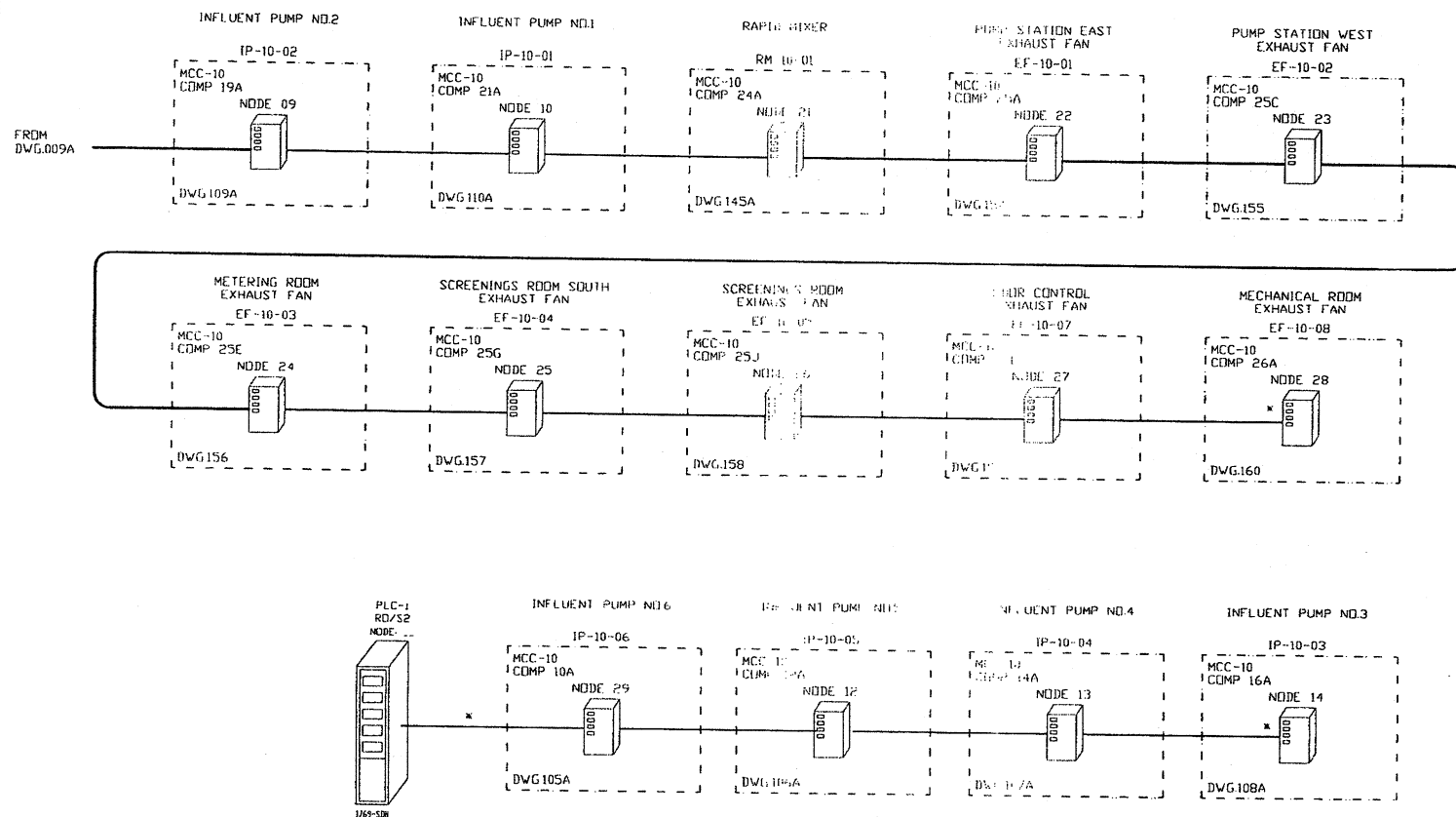
DATE LAST EDITED 7/16/2008

REVISION	
DATE	DESCRIPTION
7/17/08	RELEASE FOR CONSTRUCTION
7/22/08	AS BUILT
8/15/07	AS INSTALLED

DATE	3/16/06	PROJECT
DWN	JA	
CRD	OK	
ENGR	BA	
ASSEM		
SHEET	19 OF 149	

MCC-10 DEVICENET NODE ADDRESSING	PRD.J NO. DWG. NO. 009A
----------------------------------------	-------------------------------

Sample Network Diagram



■ 120 OHM TERMINATING RESISTOR REQUIRED

DATE LAST EDITED 7/16/2008

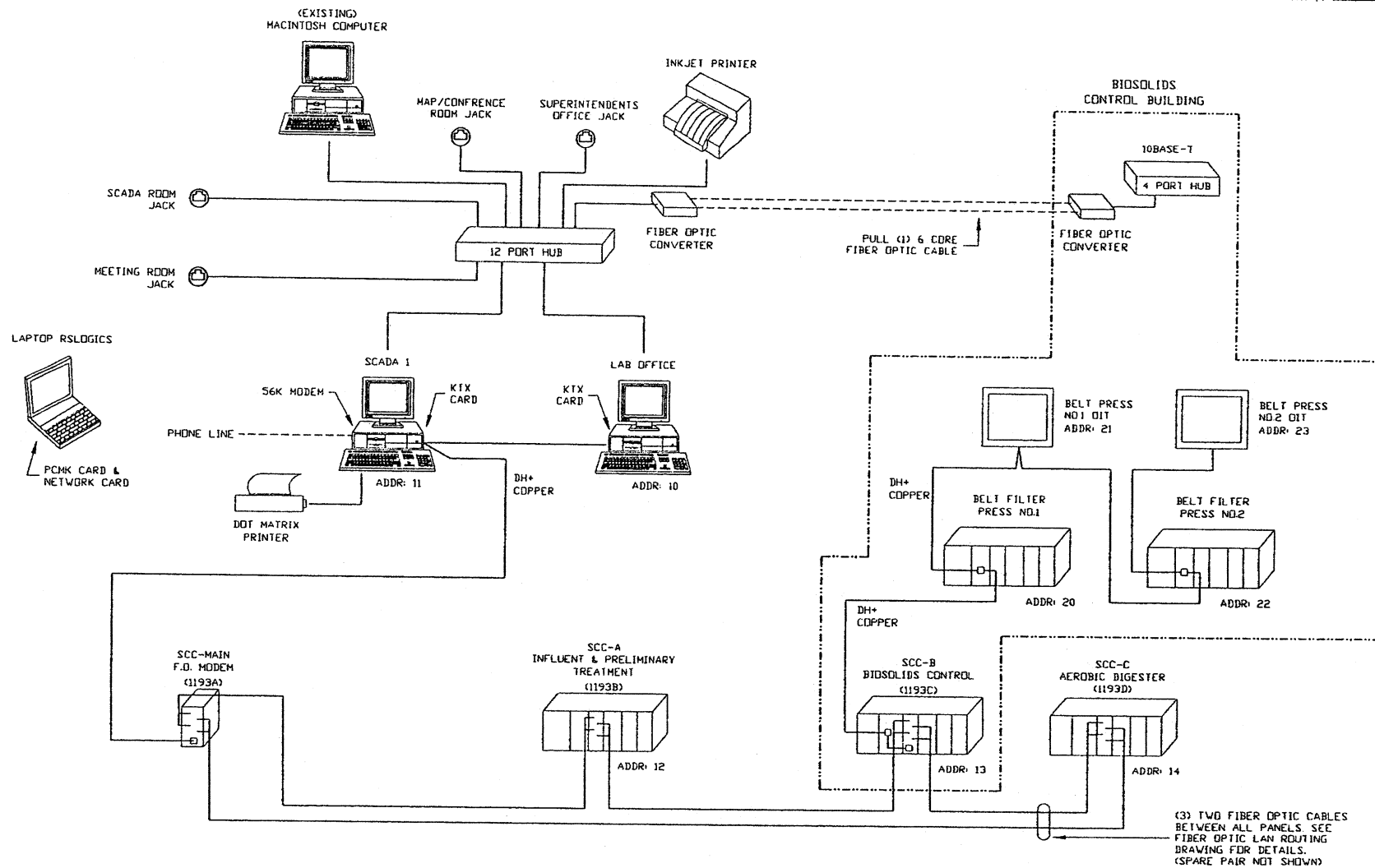
REVISION	
DATE	DESCRIPTION
02/28/03	RELEASE FOR CONSTRUCTION
03/10/03	AS NOTED
07/17/07	AS INSTALLED

DATE	3/16/06	PROJECT
DWN	JA	
CKD	JK	
ENGR	JA	
ASSEN		
SHEET	20 OF 149	

MCC-10
DEVICENET
NODE ADDRESSING

PROJ. NO.
DWG. NO.
009B

Sample Network Diagram



DATE LAST EDITED 02/09/01

REVISION	
DATE	DESCRIPTION

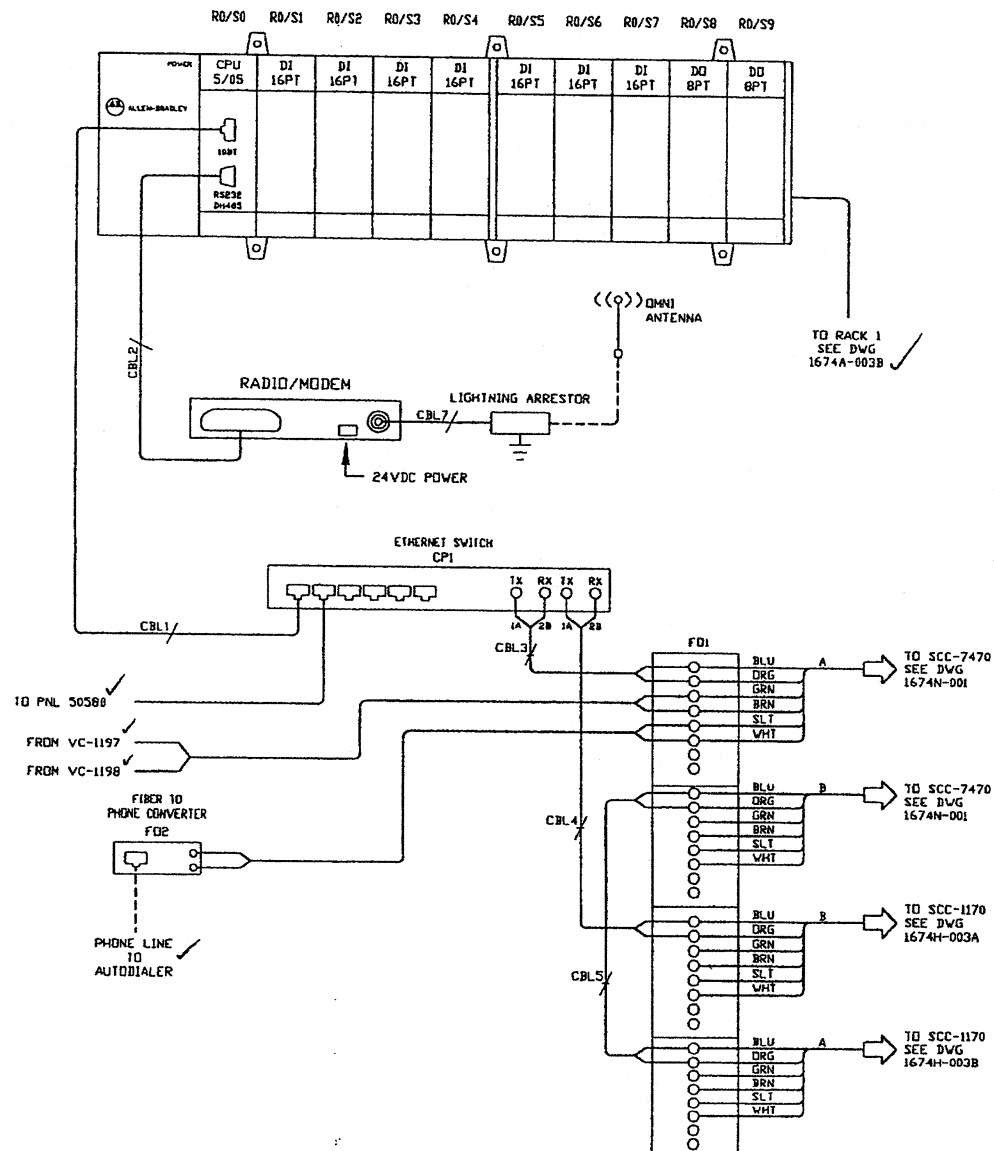
DATE	3/12/01	PROJECT
BY	JA	
CHKD	GR	
ENGR	PS	
ASSEM		
SHEET	OF	

SCADA SYSTEM LAYOUT

PROJ. NO.
DWG. NO.
001

Sample Network Diagram

SLC500 I/O SCHEDULE



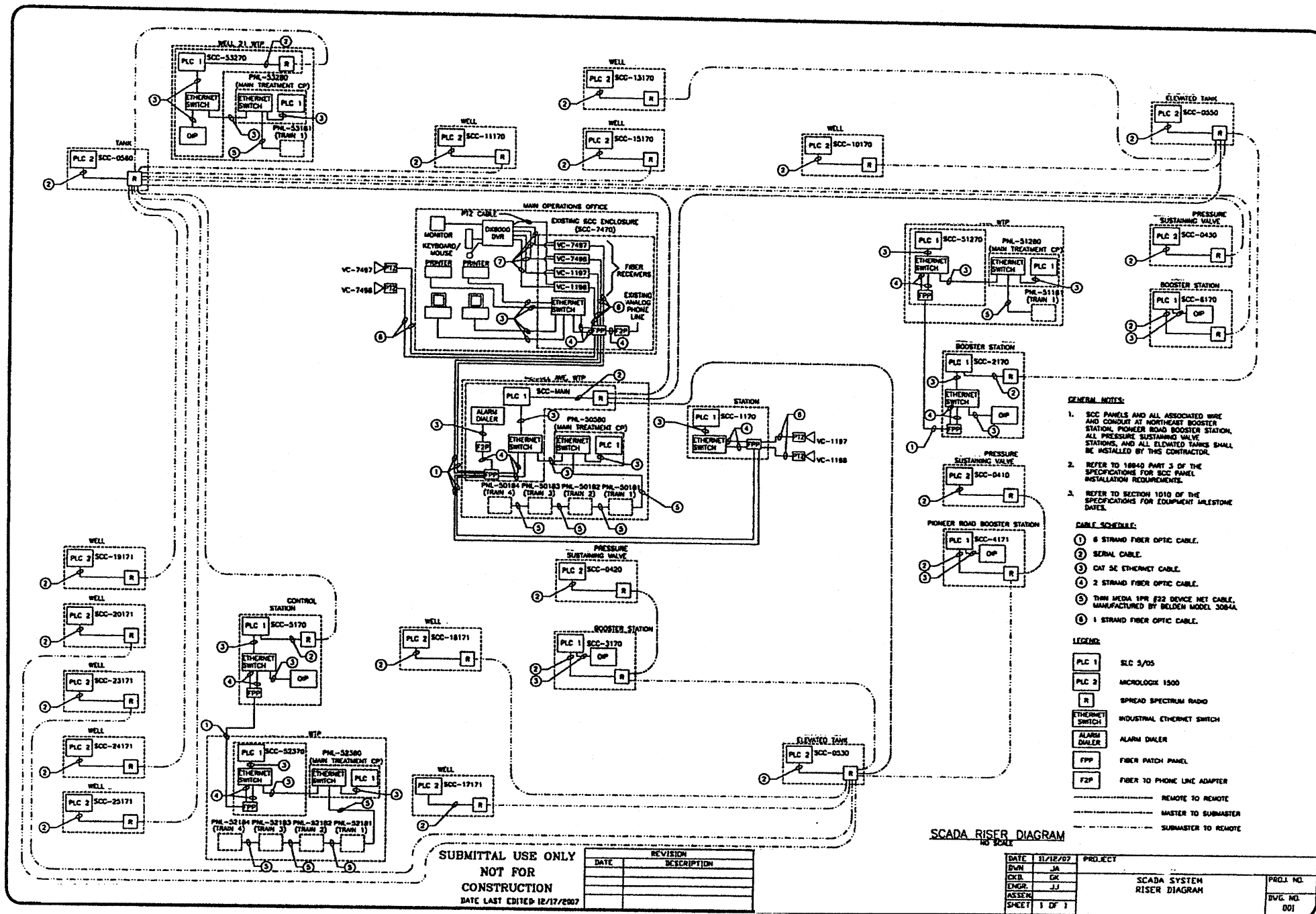
QTY	TAGS	DESCRIPTION	MFG	CATALOG
1	R0	PLC RACK 10 SLOT BASE RACK	ALLEN BRADLEY	1746-A10
1	RPS0	PLC POWER SUPPLY RACK POWER SUPPLY (5A @ 5VDC) 120/240V AC	ALLEN BRADLEY	1746-P2
1	R0/S0	PLC CPU WITH ETHERNET CPU S/05 WITH 32K MEMORY	ALLEN BRADLEY	1747-L552
7	R0/S1 R0/S2 R0/S3 R0/S4 R0/S5 R0/S6 R0/S7	PLC DIGITAL I/O MODULE 16 POINT INPUT - GENERAL PURPOSE 85-132V AC	ALLEN BRADLEY	1746-IA16
2	R0/S8 R0/S9	PLC DIGITAL I/O MODULE 8 POINT RELAY CONTACT OUTPUT (ISOLATED) 3A @ 120V AC	ALLEN BRADLEY	1746-DX8
1	CP1	8 PORT ETHERNET HUB RS20-0800M2M2DAEH01.0 10/100 MBIT/S AUTOSENSING (2) SC DUPLEX FIBER OPTIC (6) RJ45 PORTS	HIRSCHMANN	943 434-021
1	FD1	FIBER OPTIC PATCH PANEL, BLACK SVIC3-M	SIEMON COMPANY	SVIC3-M-01
4	FD1	ST BULKHEAD CONNECTOR MODULE RIC-F-SCB-01	SIEMON COMPANY	RIC-F-SCB-01
1	FD2	TELEPHONE LINE EXTENDER B6 SERIES 12VAC 500mA N/A	AMERICAN FIBERTEK	MT-86CC
1	CBL1	UTP PATCH CABLE PCXSE CAT 5E RJ45	HUBBELL	PCX5CB03
1	CBL2	SERIAL COMMUNICATIONS CABLE 1001 3 FEET DB9F/DB9M STRAIGHT THROUGH	CABLE WHOLESALE	1001-03200
3	CBL3 CBL4 CBL5	FIBER OPTIC PATCH CABLE 1 METER (1 PAIR) (2) FIBERS SC MH 62.5 SC MH 62.5	HUBBELL	DFPCSCCCIMM
1	CBL7	ANTENNA CABLE RG142B/U RG142 - 3FT LENGTH NMALE - TNC	TESSCO	448350

SUBMITTAL USE ONLY
NOT FOR
CONSTRUCTION
DATE LAST EDITED 12/6/2007

DATE	REVISION
	DESCRIPTION

DATE	12/12/2007	PROJECT	1
DWN	JA		
CHK	JK		
ENGR	JJ		
ASST			
SHEET	3 OF 34		

Sample Interconnection Diagram

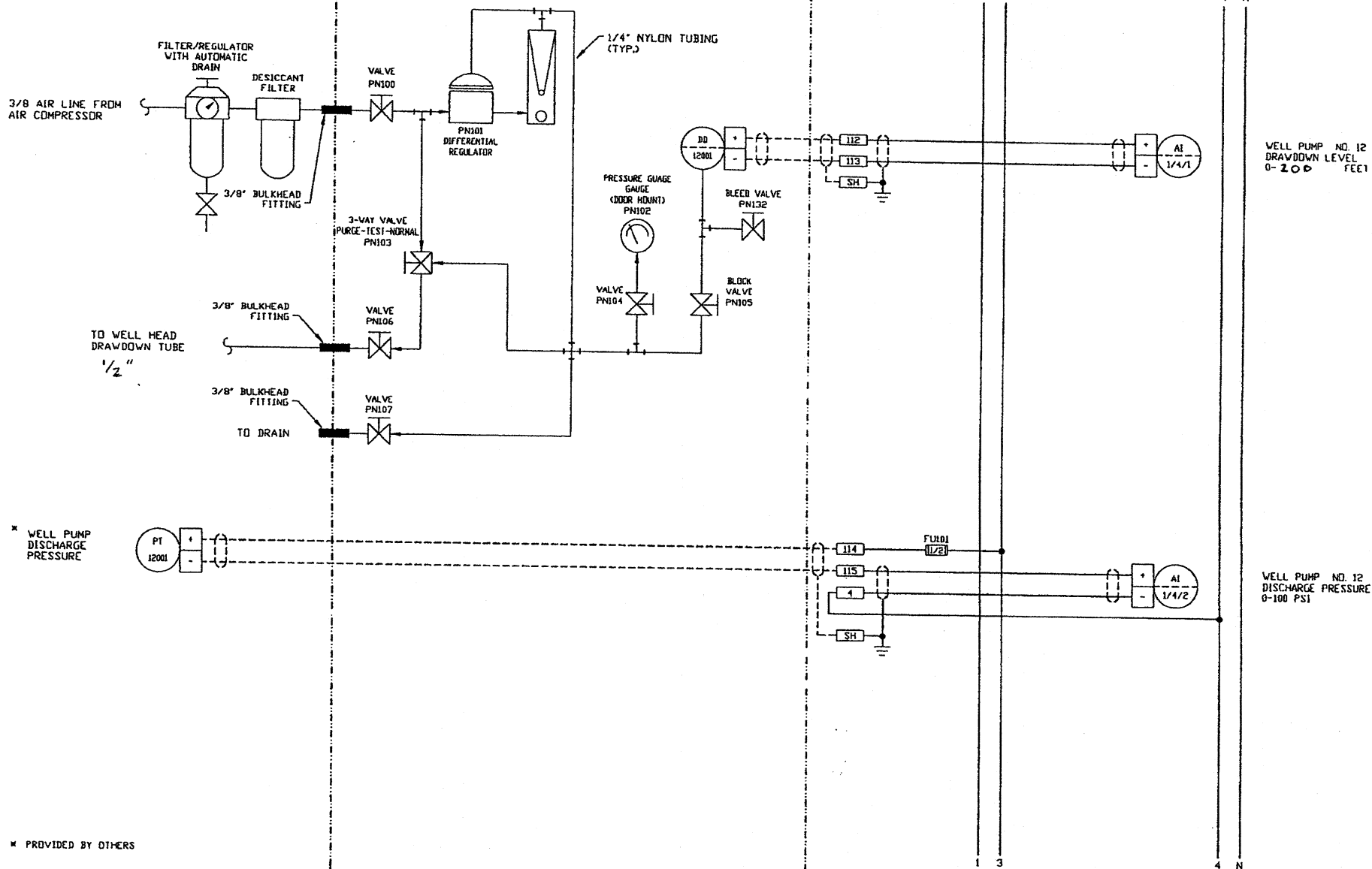


Sample Interconnection Diagram

FIELD OR AS NOTED

DRAWDOWN TRANSDUCER PANEL (1674A1-002)

SCC-MAIN

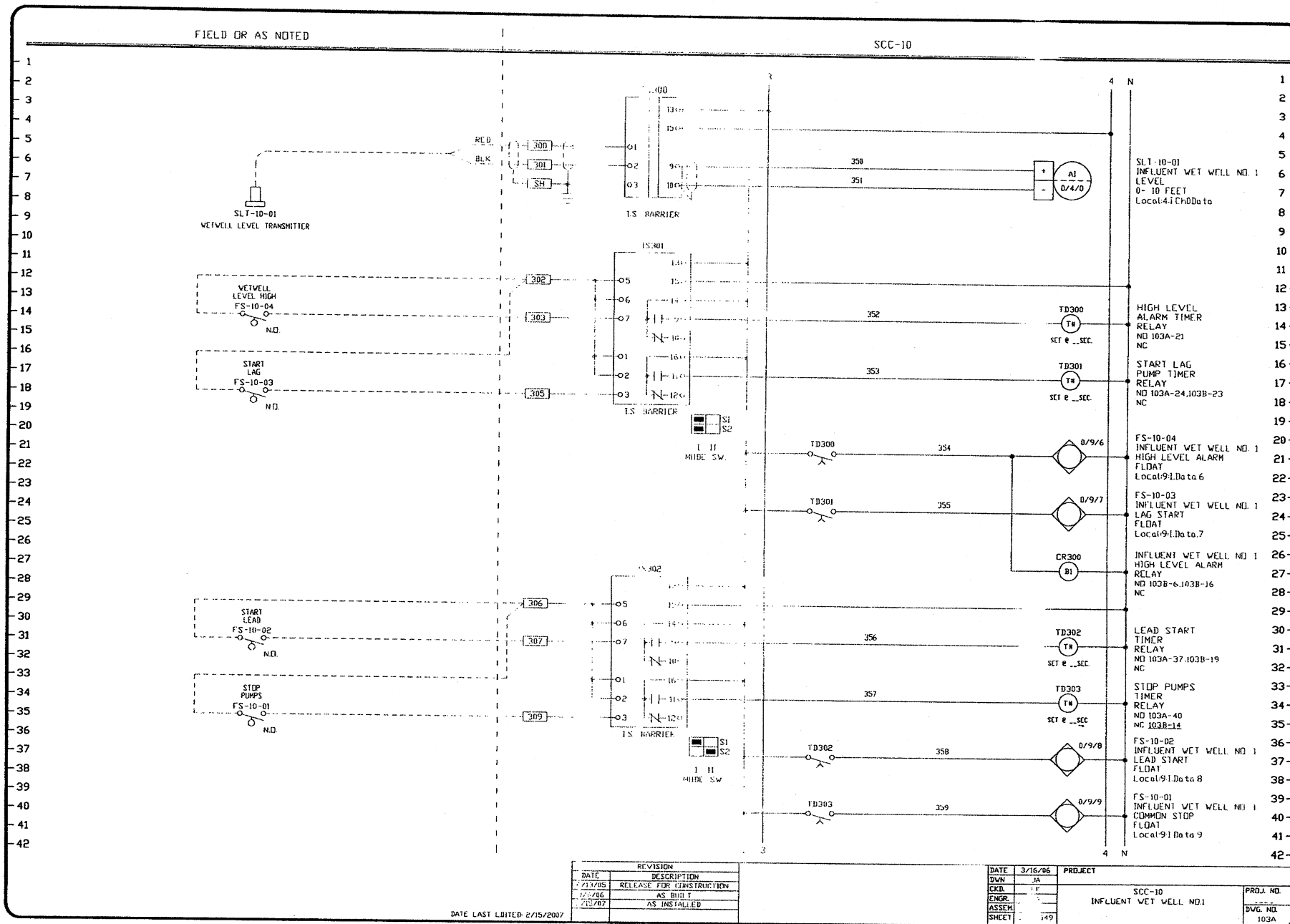


SUBMITTAL USE ONLY
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CONSTRUCTION
DATE LAST EDITED: 12/10/2007

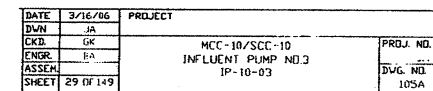
REVISION	
DATE	DESCRIPTION

DATE	11/12/2007	PROJECT
DWN	JA	SCC-MAIN WELL PUMP NO. 12
CKR	GR	
ENGR	JJ	
ASST		
SHEET	9 OF 24	PROJ. NO. DWG. NO. 101B

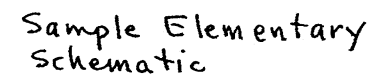
Sample Elementary schematic

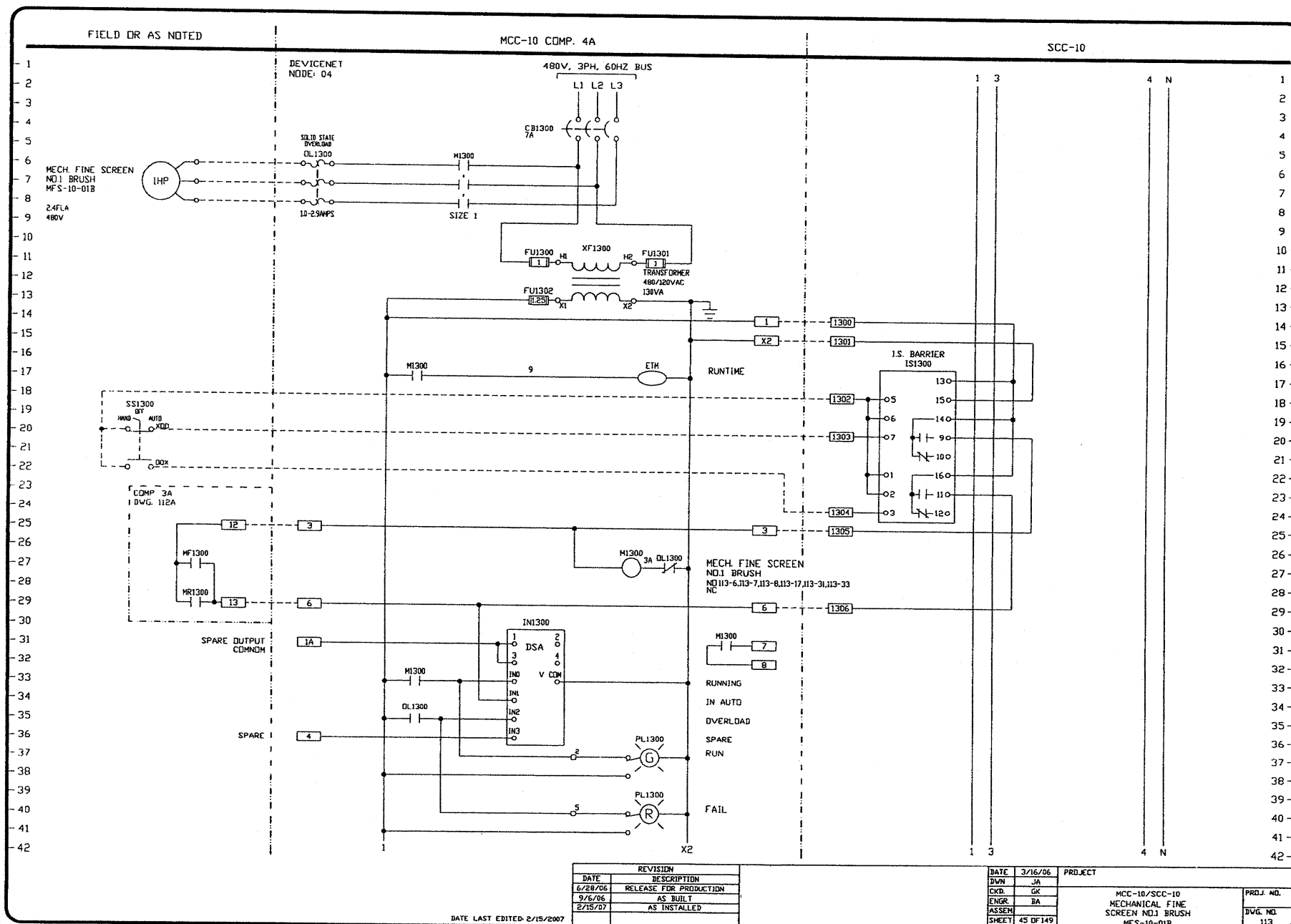


Sample Elementary
schematic



Sample Elementary
schematic



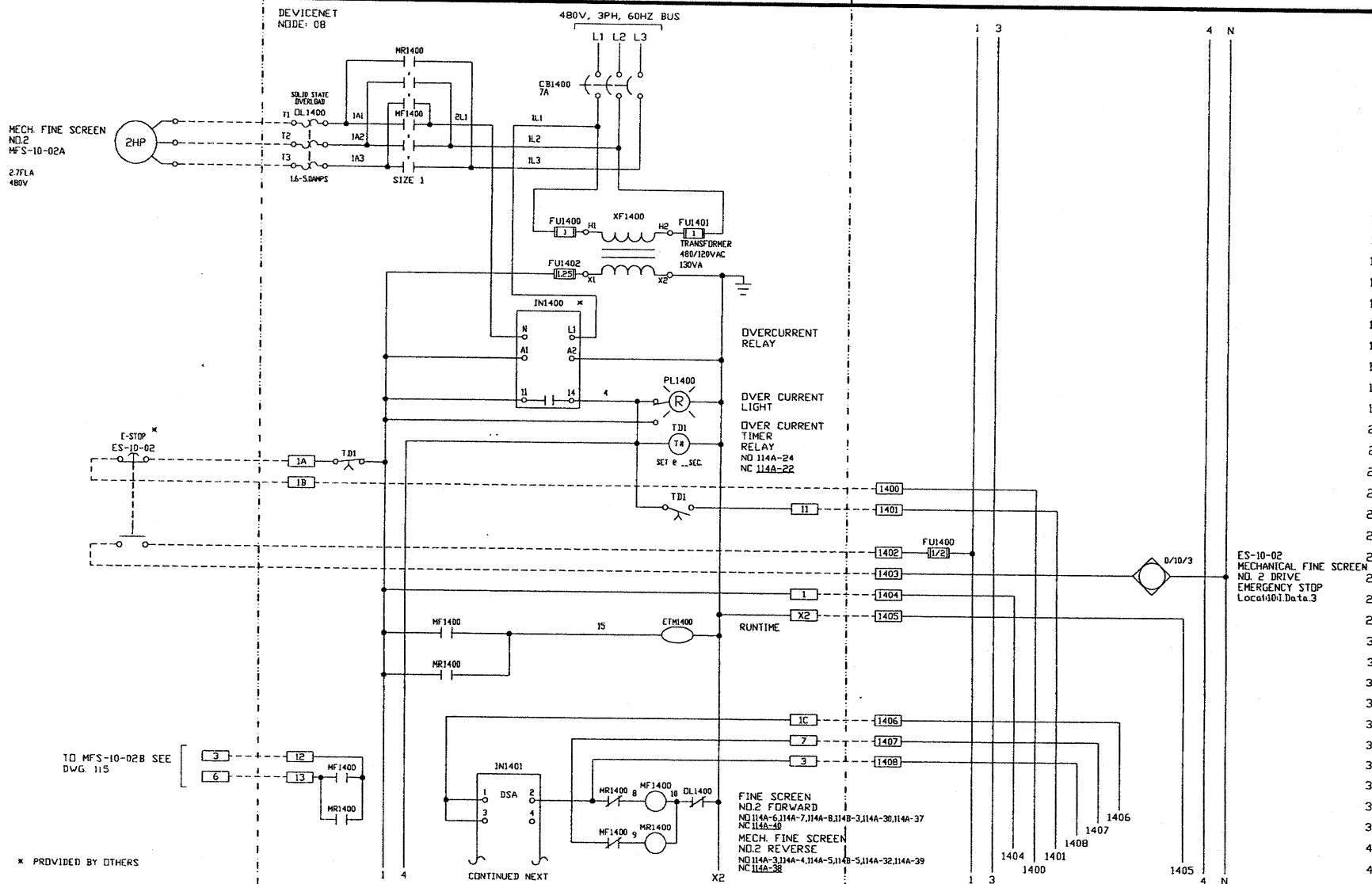


Sample Elementary
Schematic

FIELD OR AS NOTED

MCC-10 COMP. 5A

SCC-10



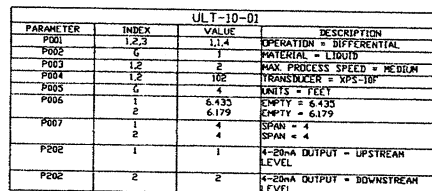
DATE	REVISION
6/28/06	RELEASE FOR PRODUCTION
9/6/06	AS BUILT
2/15/07	AS INSTALLED

DATE	BY	PROJECT
3/16/06	JA	MCC-10/SCC-10
6/28/06	GK	MECHANICAL FINE SCREEN NO.2
9/6/06	BA	MFS-10-02A
2/15/07	BA	

DATE	BY	PROJECT	PROJ. NO.
3/16/06	JA	MCC-10/SCC-10	
6/28/06	GK	MECHANICAL FINE SCREEN NO.2	
9/6/06	BA	MFS-10-02A	
2/15/07	BA		

Sample Elementary
Schematic

SCC-10



DATE	3/16/06
DWN	JA
CKD	GK
ENGR.	BA
ASSEM.	
SHEET	48 OF 149

PROJECT	
SCC-10 MECHANICAL FINE SCREEN NO.2 MFS-10-02A	PROJ NO. DWG. NO. 114C

DATE LAST EDITED: 7/16/2008

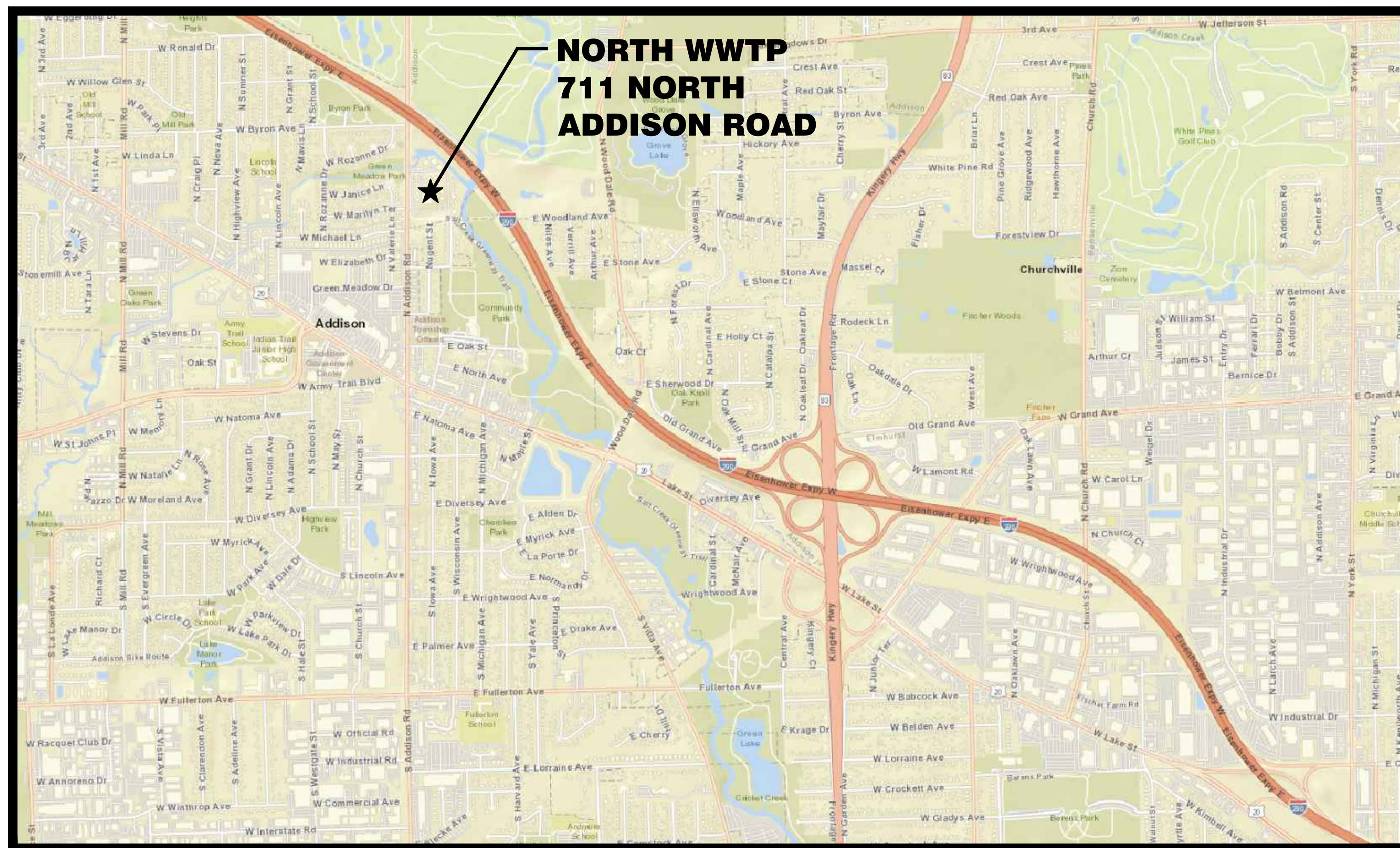
Sample Elementary Schematic

NORTH WWTP SCADA IMPROVEMENTS

FOR THE

VILLAGE OF ADDISON

DUPAGE COUNTY, ILLINOIS



LIST OF DRAWINGS

SHEET NO.	DRAWING NO.	TITLE
00-GENERAL		
1	00-G0.01	TITLE SHEET AND LOCATION PLAN
2	00-G0.02	STANDARD SYMBOLS
3	00-G0.03	ABBREVIATIONS
4	05-C1.01	SITE PLAN
5	10-E1.01	MAIN CONTROL BUILDING - ELECTRICAL PLAN
6	15-E1.01	RAW SEWAGE PUMPING STATION - ELECTRICAL PLAN
7	20-E1.01	SECONDARY TREATMENT BUILDING - ELECTRICAL PLAN
8	30-E1.01	CHLORINE BUILDING - ELECTRICAL PLAN
9	99-E7.01	SCADA RISER DIAGRAMS

DISCIPLINE DESIGNATIONS

G - GENERAL
N - P&ID
C - CIVIL
D - DEMOLITION
L - LANDSCAPE
A - ARCHITECTURAL
S - STRUCTURAL
H - HEATING, VENTILATION AND AIR CONDITIONING
M - PROCESS/MECHANICAL
F - FIRE PROTECTION AND SUPPRESSION
P - PLUMBING
E - ELECTRICAL
W - CIVIL WORKS

SHEET TYPE DESIGNATORS

0 - GENERAL (SYMBOLS)
1 - PLANS
2 - ELEVATIONS
3 - SECTIONS
4 - LARGE SCALE VIEWS
5 - DETAILS
6 - SCHEDULES AND DIAGRAMS
7 - SCHEMATICS
8 - SCHEDULES AND DETAILS

STRUCTURE IDENTIFICATION

05 - SITE
10 - MAIN CONTROL BUILDING (MCB)
15 - RAW SEWAGE PUMPING STATION (RSPS)
20 - SECONDARY TREATMENT BUILDING (STB)
30 - CHLORINE BUILDING (CL2)
40 - SLUDGE HANDLING BUILDING (SHB)



Brent M. Studnicka
1/12/2024
Exp. 11/30/2025

1170 SOUTH HOUBOLT ROAD
JOLIET, IL 60431
815 744-4200
608 251-8655 FAX
WWW.STRAND.COM
IDFPR NO. 184-001273
CONTRACT 24-1-1

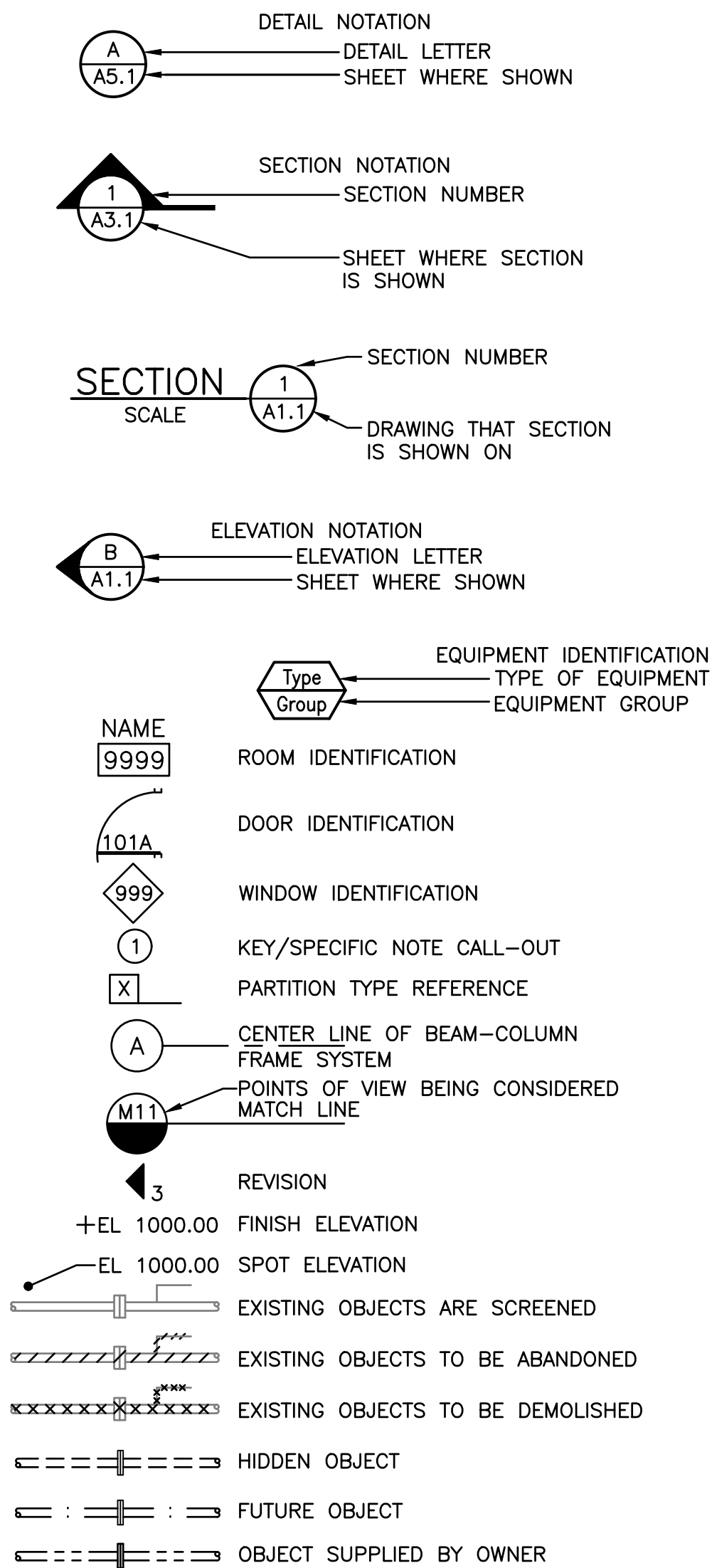
LOCATION MAP
NO SCALE



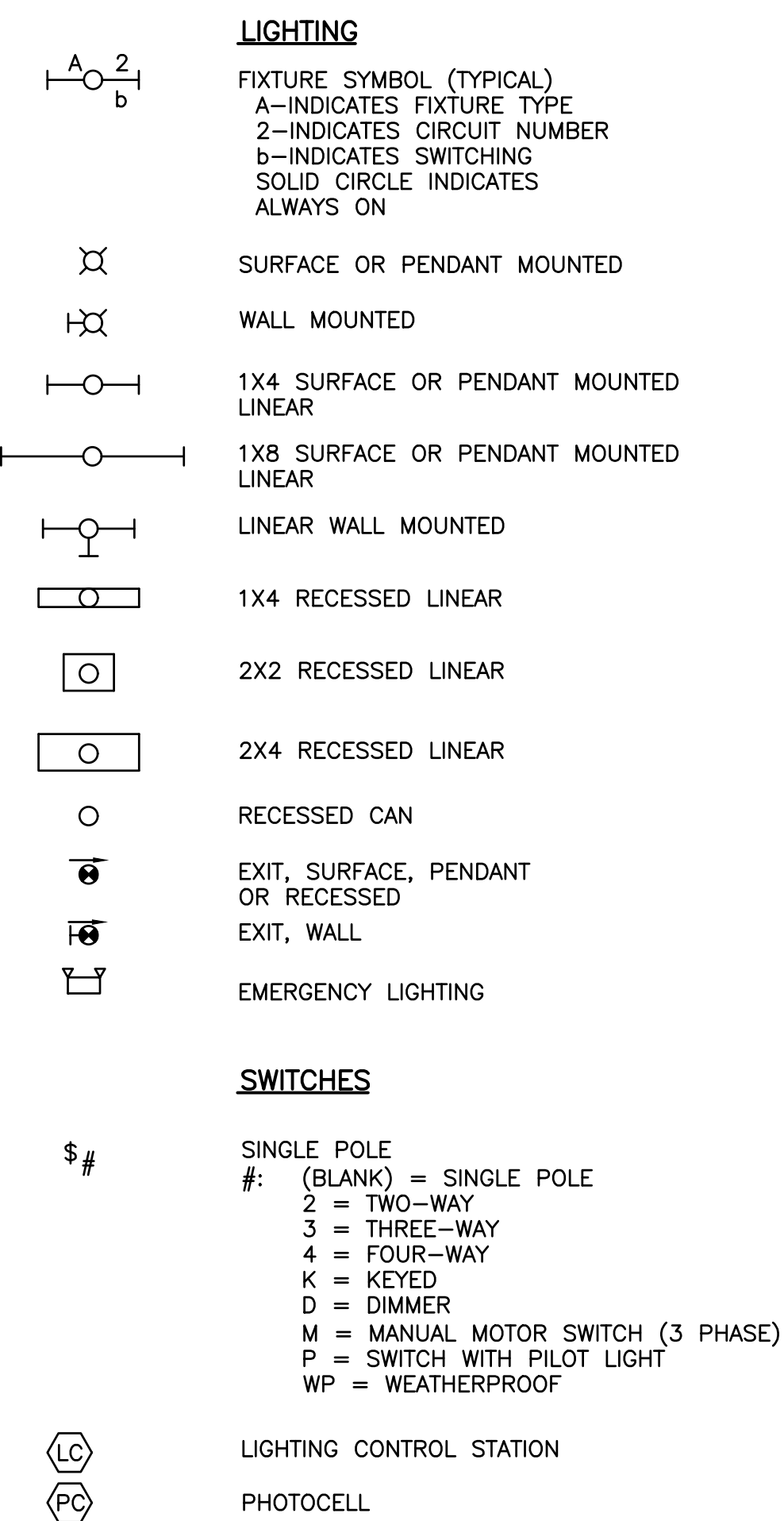
ISSUED FOR BID, 1/12/2024

SHEET
1
00-G0.01

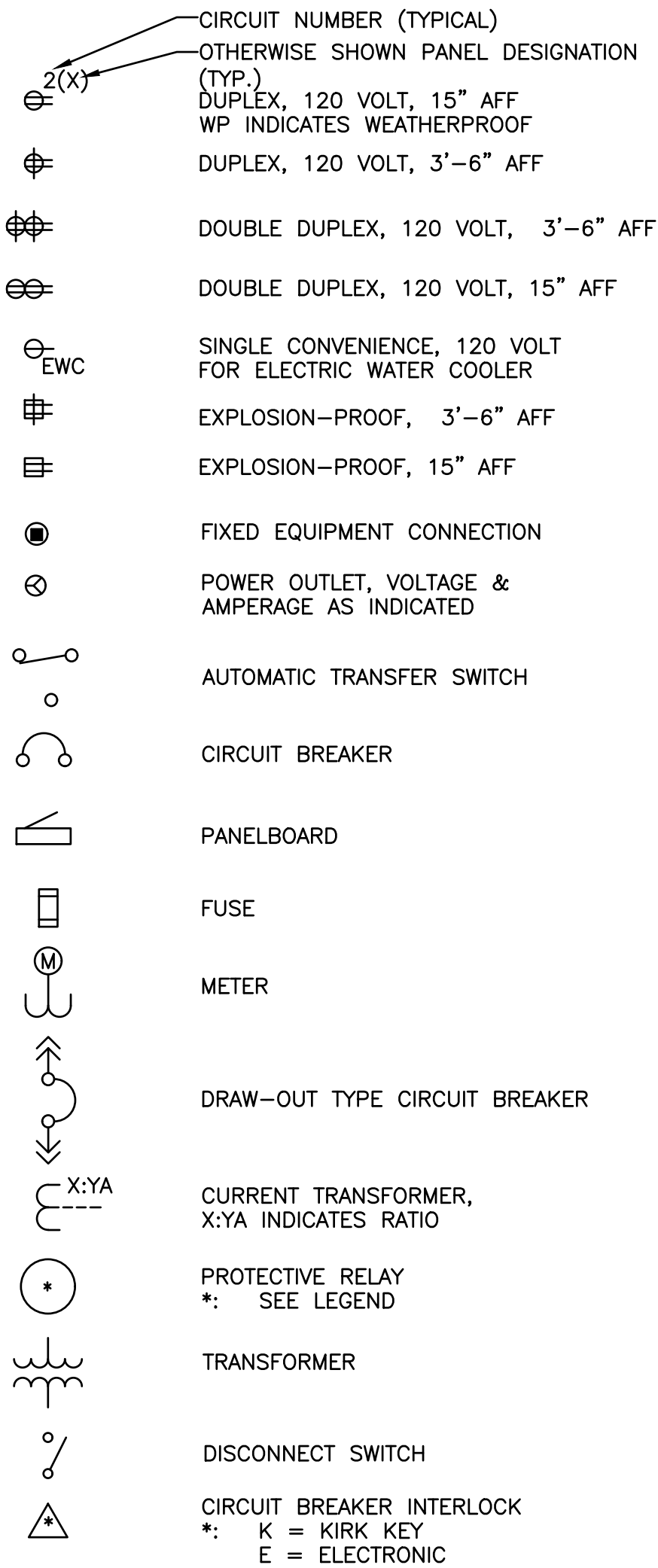
DRAFTING SYMBOLS



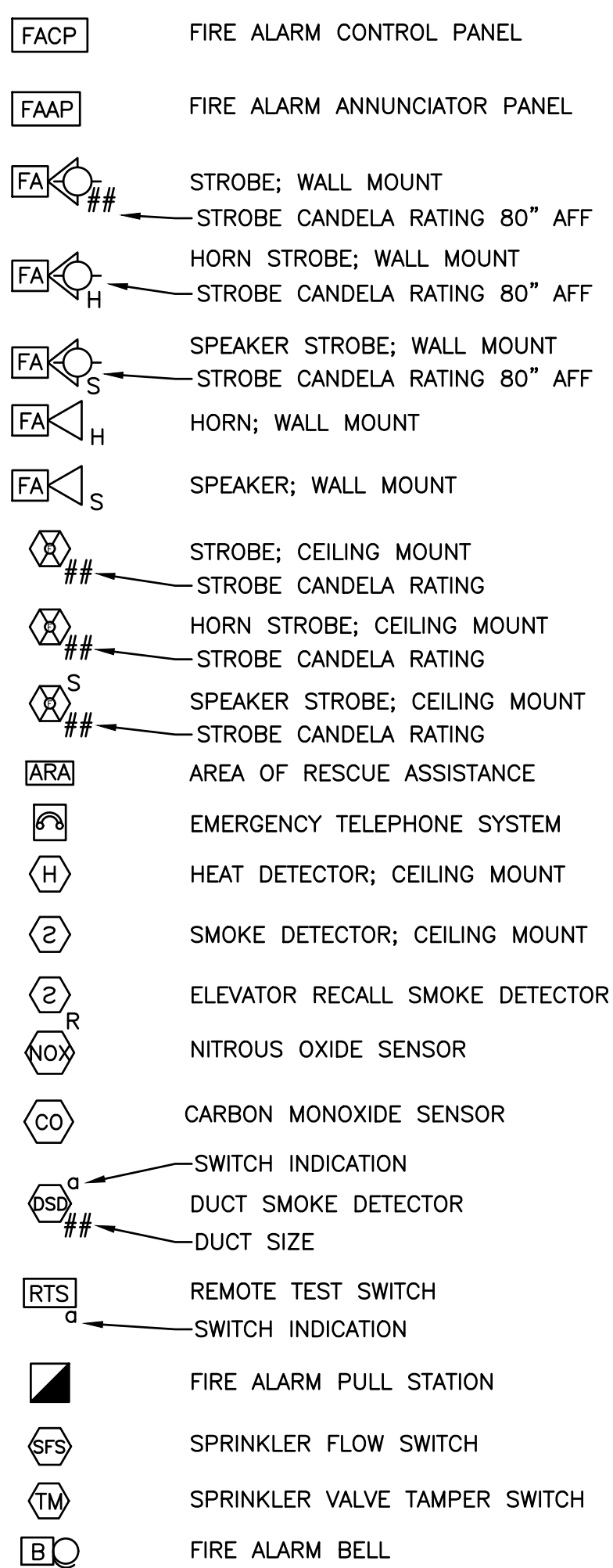
ELECTRICAL SYMBOLS



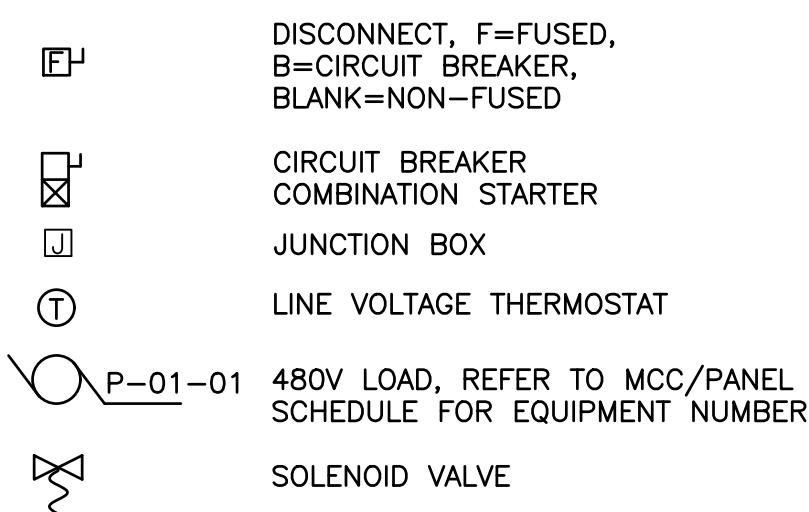
POWER AND ONE-LINE DIAGRAM SYMBOLS



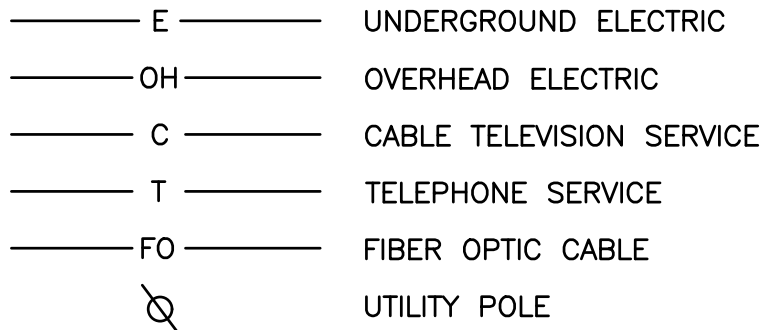
FIRE ALARM AND DETECTION SYMBOLS



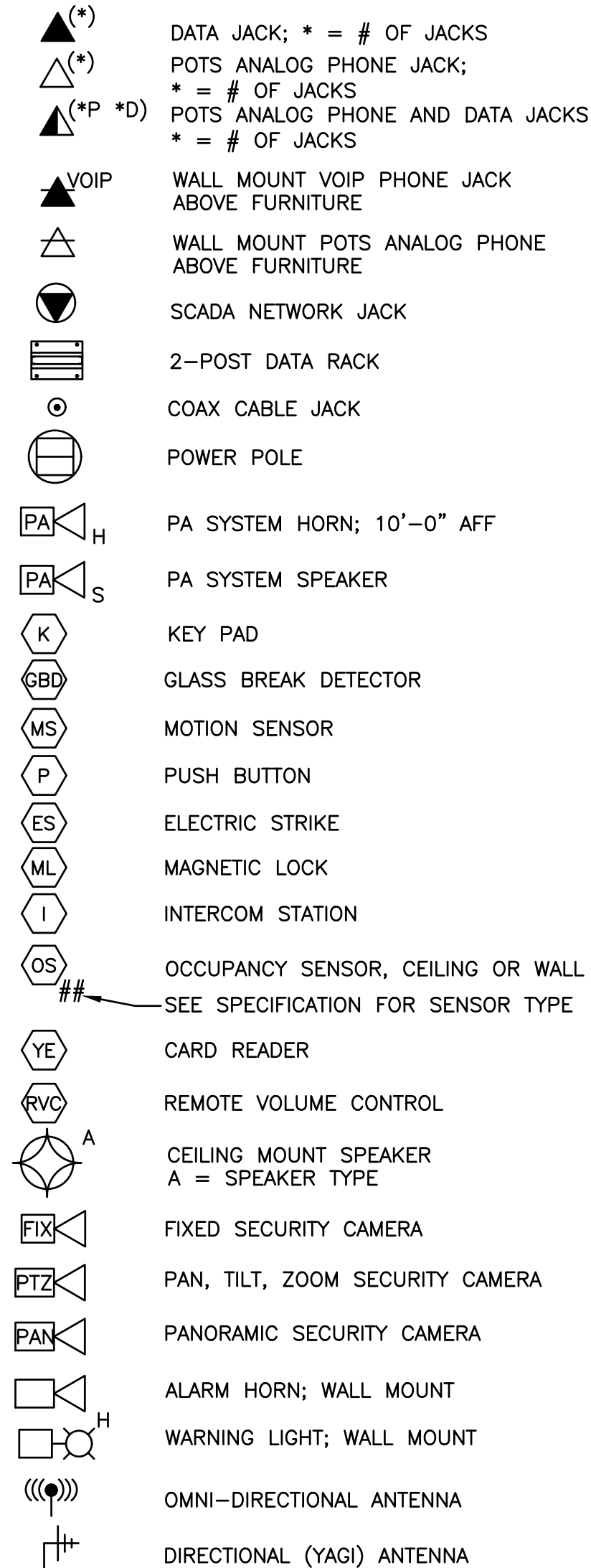
EQUIPMENT AND WIRING



SITE SYMBOLS



TECHNOLOGY SYMBOLS



INSTRUMENTATION SYMBOLS

INTERNATIONAL SOCIETY OF AUTOMATION (ISA) DEFINITION TABLE

LETTER	FIRST LETTERS		SUCCEEDING LETTERS		
	PROCESS OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS (+)		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE (+)	USER'S CHOICE (+)	USER'S CHOICE (+)
C	USER'S CHOICE (+)			CONTROL	CLOSE
D	USER'S CHOICE (+)	DIFFERENTIAL			DEVIATION
E	VOLTAGE		PRIMARY ELEMENT (SENSOR)		
F	FLOW, FLOW RATE	RATIO			
G	USER'S CHOICE (+)		GLASS, GAUGE	GATE	
H	HAND (MANUAL)				HIGH
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME, SCHEDULE	TIME RATE		CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW
M	USER'S CHOICE (+)	MOMENTARY			MIDDLE
N	USER'S CHOICE (+)		USER'S CHOICE (+)	USER'S CHOICE (+)	USER'S CHOICE (+)
O	USER'S CHOICE (+)		ORIFICE, RESTRICTION		OPEN
P	PRESSURE, VACUUM		POINT (TEST CONNECTION)		
Q	QUANTITY (+)	INTEGRATE	INTEGRATE		
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE (+)		MULTIFUNCTION (+)	MULTIFUNCTION (+)	MULTIFUNCTION (+)
V	VISCOSITY, VIBRATION			VALVE, DAMPER	
W	WEIGHT, FORCE		WELL, PROBE		
X	UNCLASSIFIED (+)	X-AXIS	UNCLASSIFIED (+)	UNCLASSIFIED (+)	UNCLASSIFIED (+)
Y	EVENT, STATE, PRESENCE (+)	Y-AXIS		RELAY, COMPUTE (+)	
Z	POSITION, DIMENSION	Z-AXIS		DRIVE, ACTUATOR OR UNCLASSIFIED FINAL CONTROL ELEMENT	

(+) WHEN USED, EXPLANATION IS SHOWN ADJACENT TO INSTRUMENT SYMBOL. SEE ABBREVIATIONS AND LETTER SYMBOLS.

DEVICE TAG NAMING & DESCRIPTORS

EQUIPMENT

TAG NAMING: W-XY-Z
W = TYPE OF EQUIPMENT
XY = LOOP/STRUCTURE NUMBER
Z = UNIT NUMBER

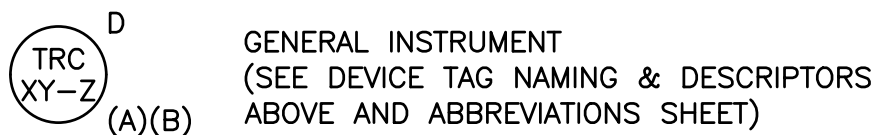
CONTROL & INSTRUMENTATION

TAG NAMING: TRC-XY-Z
T = FIRST LETTER FROM ISA DEFINITION TABLE
RC = SUCCEEDING LETTERS FROM ISA DEFINITION TABLE
XY = LOOP/STRUCTURE NUMBER
Z = UNIT NUMBER

ADDITIONAL DESCRIPTORS:

A = NUMBER OF UNITS DEPICTED (BLANK IF ONE)
B = NUMBER OF SETS DEPICTED (BLANK IF ONE)
D = SUPPLEMENTAL DESCRIPTION (REFER TO INSTRUMENT-SPECIFIC ELECTRICAL ABBREVIATIONS)

INSTRUMENTS



STANDARD SYMBOLS

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

JOB NO.
1586.003

PROJECT MGR.
BRENT STUDNICKA


SA
STRAND
ASSOCIATES®

SHEET
2
00-G0.02

GENERAL EQUIPMENT ABBREVIATIONS		PLUMBING ABBREVIATIONS		ELECTRICAL ABBREVIATIONS		INSTRUMENT-SPECIFIC ELECTRICAL ABBREVIATIONS	
AC	AIR COMPRESSOR	SCMP	SCUM PUMP	FO	FAIL OPEN	NM	NONMETALLIC
ACU	ACCUMULATOR	SCW	SCREENINGS WASHER	FPI	FINS PER INCH	NO	NORMALLY OPEN
ADT	AUTOMATIC DRIP TRAP	SEJ	SEWAGE EJECTOR	FPM	FEET PER MINUTE	NSF	NATIONAL SANITARY FOUNDATION
AFT	AUTOMATIC FILTER	SG	SLIDE GATE	FT	FEET	NTS	NOT TO SCALE
AOV	AIR OPERATED VALVE	SHFP	SODIUM HYPOCHLORITE FEED PUMP	GA	GAUGE	OCB	OIL CIRCUIT BREAKER
AM	ANOXIC MIXER	SHST	SODIUM HYPOCHLORITE STORAGE TANK	GPM	GALLONS PER MINUTE	OL	OVERLOAD
AST	AUTOMATIC STRAINER	SLG	SLUICE GATE	LAT	LEAVING AIR TEMPERATURE	OIP	OPERATOR INTERFACE PANEL
BSLP	BLENDED SLUDGE PUMP	SP	SUMP PUMP	LWT	LEAVING WATER TEMPERATURE	OT	OVERTEMP
B	BLOWER	SRT	SILOXANE REMOVAL TANK	MBH	THOUSANDS OF BTU PER HOUR	PR	PAIR
BC	BRIDGE CRANE	SSC	SCREENINGS SCREW CONVEYOR	MC	MECHANICAL CONTRACTOR	P	POLE
BFP	BELT FILTER PRESS	STCP	STRUVITE CHEMICAL PUMP	NA	NOT APPLICABLE	PB	PULL BOX
BFPPF	BFP FEED PUMP	STG	STOP GATE	NC	NORMALLY CLOSED	PC	PULL CORD
BFV	BUTTERFLY VALVE	STR	STRAINER	NO	NORMALLY OPEN	PH	PH SENSOR
BLP	BIOSOLIDS LOADING PUMP	SV	SOLENOID VALVE	NPT	NATIONAL PIPE THREAD	ø	PHASE
BLR	BOILER	SWP	SCREENINGS WASHER/PRESS	NTS	NOT TO SCALE	PNL	PANELBOARD
BP	BOOSTER PUMP	TV	TELESCOPING VALVE	OA	OUTSIDE AIR	PP	POWER PANEL
BSLMP	BLENDED SLUDGE MIXING PUMP	TWA&D TWA&D DUM&D		OC	ON CENTER	PRI	PRIMARY
BSLP	BLENDED SLUDGE PUMP	FLUID ABBREVIATIONS		OV	OUTLET VELOCITY	PT	POTENTIAL TRANSFORMER
BSTM	BIOSOLIDS STORAGE MIXER	A	AIR	PD	PRESSURE DROP	PTZ	PAN, TILT, ZOOM CAMERA
BTP	BIOSOLIDS TRANSFER PUMP	BOX	BIOXIDE	PSI	POUNDS PER SQUARE INCH	PVC	POLYVINYL CHLORIDE
BWP	BACKWASH PUMP	BSL	BLENDED SLUDGE	PSIG	POUNDS PER SQUARE INCH GAUGE	PWR	POWER
CENT	CENTRIFUGE	BWW	BACKWASH WATER	RA	RETURN AIR	RSC	RIGID GALVANIZED STEEL CONDUIT
CNTP	CENTRATE PUMP	CA	COMPRESSED AIR	RPM	REVOLUTIONS PER MINUTE	RTS	REMOTE TEST SWITCH
CENTP	CENTRIFUGE FEED PUMP	CNT	CENTRATE	SA	SUPPLY AIR	RVNR	REDUCED VOLTAGE NON-REVERSING
CP	CHEMICAL PUMP	CDG	COMPRESSED DIGESTER GAS	SP	STATIC PRESSURE	RVSS	REDUCED VOLTAGE SOLID STATE
COMP	COMPRESSOR	CLS	CHLORINE SOLUTION	HVAC EQUIPMENT ABBREVIATIONS		SC	SHORT CIRCUIT
CON	CONVEYOR	CNT	CENTRATE	ACCU	AIR COOLED CONDENSING UNIT	SCADA	SUPERVISORY CONTROL AND DATA
DBC	DEWATERED BIOSOLIDS CONVEYOR	CW	COLD WATER	AFR	ARCHITECTURAL FINE TUBE RADIATION	SCC	SUPERVISORY CONTROL CENTER
DCP	DECANT PUMP	CWR	CHILLED WATER RETURN	AHU	AIR HANDLING UNIT	SE	SERVICE ENTRANCE
DEWP	DISINFECTED EFFLUENT PUMP	CWS	CHILLED WATER SUPPLY	AS	AIR SEPARATOR	SEC	SECONDARY
DP	DRAINAGE PUMP	D	DRAIN	BLR	BOILER	SH	SHIELDED
DRLP	DIGESTER RECIRCULATION PUMP	DEW	DISINFECTED EFFLUENT WATER	BB	BASEBOARD	SHD	SURGE PROTECTION DEVICE
DSLMP	DIGESTER MIXING PUMP	DG	DIGESTER GAS	C	CONVECTOR	SS	STAINLESS STEEL
DSLTP	DIGESTED SLUDGE TRANSFER PUMP	DIV	DIVERSION	CD	CEILING DIFFUSER	STP	SHIELDED TWSTED PAIR
DT	DRIP TRAP	DRL	DIGESTER RECIRCULATION	CHILL	CHILLER	SV	SOLENOID VALVE
DOW	DOWNWARD OPENING WEIR GATE	DS	DIGESTER SUPERNATANT	CT	COOLING TOWER	SW	SWITCH
EFC	EXCESS FLOW CLARIFIER	DSL	DIGESTED SLUDGE	CUH	CABINET UNIT HEATER	SWBD	SWTCHBOARD
EFP	EXCESS FLOW PUMP	DSL MD	DIGESTER SLUDGE MIXER DISCHARGE	CWP	CHILLED WATER PUMP	TEL	TELEPHONE
EFSP	EXCESS FLOW SOLIDS PUMP	DSL MS	DIGESTER SLUDGE MIXER SUCTION	DC	DRY COOLER	TS2W	TWO SPEED TWO WINDING
EP	EFFLUENT PUMP	EF	EXCESS FLOW	DH	DEHUMIDIFIER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
FC	FINAL CLARIFIER	EFS	EXCESS FLOW SOLIDS	DL	DRUM LOUVER	TYP	TYPICAL
FCD	FINAL CLARIFIER DRIVE	FE	FINAL EFFLUENT	EBB	ELECTRIC BASEBOARD	UG	UNDERGROUND
FEP	FINAL EFFLUENT PUMP	F	FORCE MAIN	EDH	ELECTRIC DUCT HEATER	UH	UNIT HEATER
FILT	FILTER	G	NATURAL GAS	EF	EXHAUST FAN	UPS	UNINTERRUPTIBLE POWER SUPPLY
FM	FLOW METER	GR	GRIT	EG	EXHAUST GRILLE	UTP	UNSHIELDED TWSTED PAIR
FO	FERMENTER OVERFLOW	GTS	GRAVITY THICKENER SUPERNATANT	EJ	EXPANSION JOINT	V	VOLTS
FRS	FERMENTED SLUDGE	HHGR	HEATING HOT GLYCOL RETURN	EL	EXPANSION LOOP	VFD	VARIABLE FREQUENCY DRIVE
FT	FLAME TRAP	HHGS	HEATING HOT GLYCOL SUPPLY	ER	EXHAUST REGISTER	W	WIRE OR WATT
GBT	GRAVITY BELT THICKENER	HOCL	HYPOCHLORITE	ERC	ELECTRIC REHEAT COIL	WD	HIGH PRESSURE WASH DOWN
GC	GRIT CLASSIFIER	HW	HOT WATER	ERU	ENERGY RECOVERY UNIT	WL	WET LOCATION
GFM	GAS FLOW METER	HWR	HOT WATER RETURN	EUH	ELECTRIC UNIT HEATER	WP	WEATHERPROOF
GCS	GAS COMPRESSOR SKID	HWS	HOT WATER SUPPLY	EWH	ELECTRIC WALL HEATER	XFMR	TRANSFORMER
GP	GRIT PUMP	ML	MIXED LIQUOR	FCU	FAN COIL UNIT		
GRN	GRINDER	MLW	MILL WASTE	FD	FIRE DAMPER		
GT	GRIT TRAP	MTW	METRO WASTE	FR	FINNED TUBE RADIATION		
GUH	GAS UNIT HEATER	NAOH	SODIUM HYDROXIDE	FUR	FURNACE		
GW	GRIT WASHER	NPW	NONPOTABLE WATER	GDF	GAS DUCT FURNACE		
H	HOIST	OF	OVERFLOW	GRV	GRAVITY ROOF VENTILATOR		
HBT	HYDROPNEUMATIC BOOSTER TANK	OC	ODOR CONTROL	GUH	GAS UNIT HEATER		
HTX	HEAT EXCHANGER	PD	PLANT DRAIN	HC	HEATING COIL		
IP	INFLUENT PUMP	PDP	PERFORATED DRAIN PIPE	HP	HEAT PUMP		
MA	MOTORIZED ACTUATOR	PE	PLANT EFFLUENT	HRP	HEAT RECOVERY PUMP		
MBV	MOTORIZED BALL VALVE	PEC	POLYELECTROLYTE CHEMICAL	HU	HUMIDIFIER		
MFS	MECHANICAL FINE SCREEN	PER	PLANT EFFLUENT REUSE	HUH	HOT WATER UNIT HEATER		
MIX	MIXER	PI	PLANT INFLUENT	HWP	HOT WATER PUMP		
MOV	MOTOR OPERATED VALVE	PRC	PHOSPHORUS REMOVAL CHEMICAL	HTX	HEAT EXCHANGER		
MP	MIXING PUMP	PRE	PRIMARY EFFLUENT	ICF	INDUSTRIAL CEILING FAN		
MPE	MISCELLANEOUS PROCESS EQUIPMENT	PRF	PROCESS RETURN FLOW	IR	INFRARED HEATER		
MST	MANUAL STRAINER	PRI	PRIMARY INFLUENT	L	LOUVER		
MT	MICROTURBINE	PRS	PRIMARY SLUDGE	MAU	MAKE-UP AIR UNIT		
NRP	NITRATE RECYCLE PUMP	PSS	PLANT SANITARY SEWER	P	PUMP		
OCD	OVERHEAD COILING DOOR	PW	POTABLE WATER	PWP	PROCESS WATER PUMP		
OCE	ODOR CONTROL EQUIPMENT	PWR	PROCESS WATER RETURN	RF	RETURN FAN		
ODE	OXIDATION DITCH EQUIPMENT	PWS	PROCESS WATER SUPPLY	RG	RETURN GRILLE		
PC	PROGRESSING CAMTY PUMP	RAS	RETURN ACTIVATED SLUDGE	RR	REGISTER		
PCD	PRIMARY CLARIFIER DRIVE	RW	RAW WASTEWATER	RTU	ROOFTOP UNIT		
PCFD	PRIMARY CLARIFIER FLOCCULATOR DRIVE	SAM	SAMPLE	SD	SUCTION DIFFUSER		
PF	POLYMER FEEDER	SAN	SANITARY SEWER	SF	SUPPLY FAN		
PFP	POLYMER FEED PUMP	SB	SODIUM BISULFITE	SG	SUPPLY GRILLE		
PLWP	PLANT WATER PUMP	SCM	SCUM	SR	SUPPLY REGISTER		
PRCP	PHOSPHORUS REMOVAL CHEMICAL PUMP	SCMD	SCUM DECANT	ST	STEAM TRAP		
PRCT	PHOSPHORUS REMOVAL CHEMICAL TANK	SE	SECONDARY EFFLUENT	SUH	STEAM UNIT HEATER		
PREP	PRIMARY EFFLUENT PUMP	SH	SODIUM HYPOCHLORITE	TCP	TEMPERATURE CONTROL PANEL		
PRFP	PROCESS RETURN FLOW PUMP	SL	SLUDGE	TG	TRANSFER GRILLE		
PRSP	PRIMARY SLUDGE PUMP	SPD	SUMP PUMP DISCHARGE	UH	UNIT HEATER		
PTP	POLYMER TRANSFER PUMP	SSM	SECONDARY SCUM	UV	UNIT VENTILATOR		
RAD	REFRIGERATED AIR DRYER			VAV	VARIABLE AIR VOLUME BOX		
RASP	RETURN ACTIVATED SLUDGE PUMP			VD	VOLUME DAMPER		
RDT	ROTARY DRUM THICKENER			VFD	VARIABLE FREQUENCY DRIVE		
RDTP	ROTARY DRUM THICKENER FEED PUMP			WSHP	WATER SOURCE HEAT PUMP		
RM	RAPID MIXER			XT	EXPANSION TANK		
SA	SAMPLER						
SBFP	SODIUM BISULFITE FEED PUMP						
SBST	SODIUM BISULFITE STORAGE TANK						

GENERAL/HVAC ABBREVIATIONS	
ACH	AIR CHANGES PER HOUR
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
AP	ACCESS PANEL
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
COND	CONDENSATE
DAT	DISCHARGE AIR TEMPERATURE
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DG	DOOR GRILLE
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EL	ELEVATION
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
FC	FAIL CLOSED
FLA	FULL LOAD AMPS

ABBREVIATIONS	
DATE:	1/12/2024
NO.	1
REVISIONS	ISSUED FOR BID

JOB NO. 1586.003	
PROJECT MGR. BRENT STUDNICKA	
	
SHEET 3 00-G0.03	

NORTH WWTP SCADA IMPROVEMENTS

VILLAGE OF ADDISON

DUPAGE COUNTY, ILLINOIS



STRUCTURE IDENTIFICATION

- 05 - SITE
- 10 - MAIN CONTROL BUILDING (MCB)
- 15 - RAW SEWAGE PUMPING STATION (RSPS)
- 20 - SECONDARY TREATMENT BUILDING (STB)
- 30 - CHLORINE BUILDING (CL2)
- 40 - SLUDGE HANDLING BUILDING (SHB)



811 OR 800.892.0123
REQUIRES A MIN. OF 48 HOURS NOTICE
BEFORE YOU EXCAVATE.
(EXCLUDING SAT., SUN., AND HOL.)

NO.	REVISIONS	DATE:
1	ISSUED FOR BID	1/12/2024

SITE PLAN

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

JOB NO.
1586.003

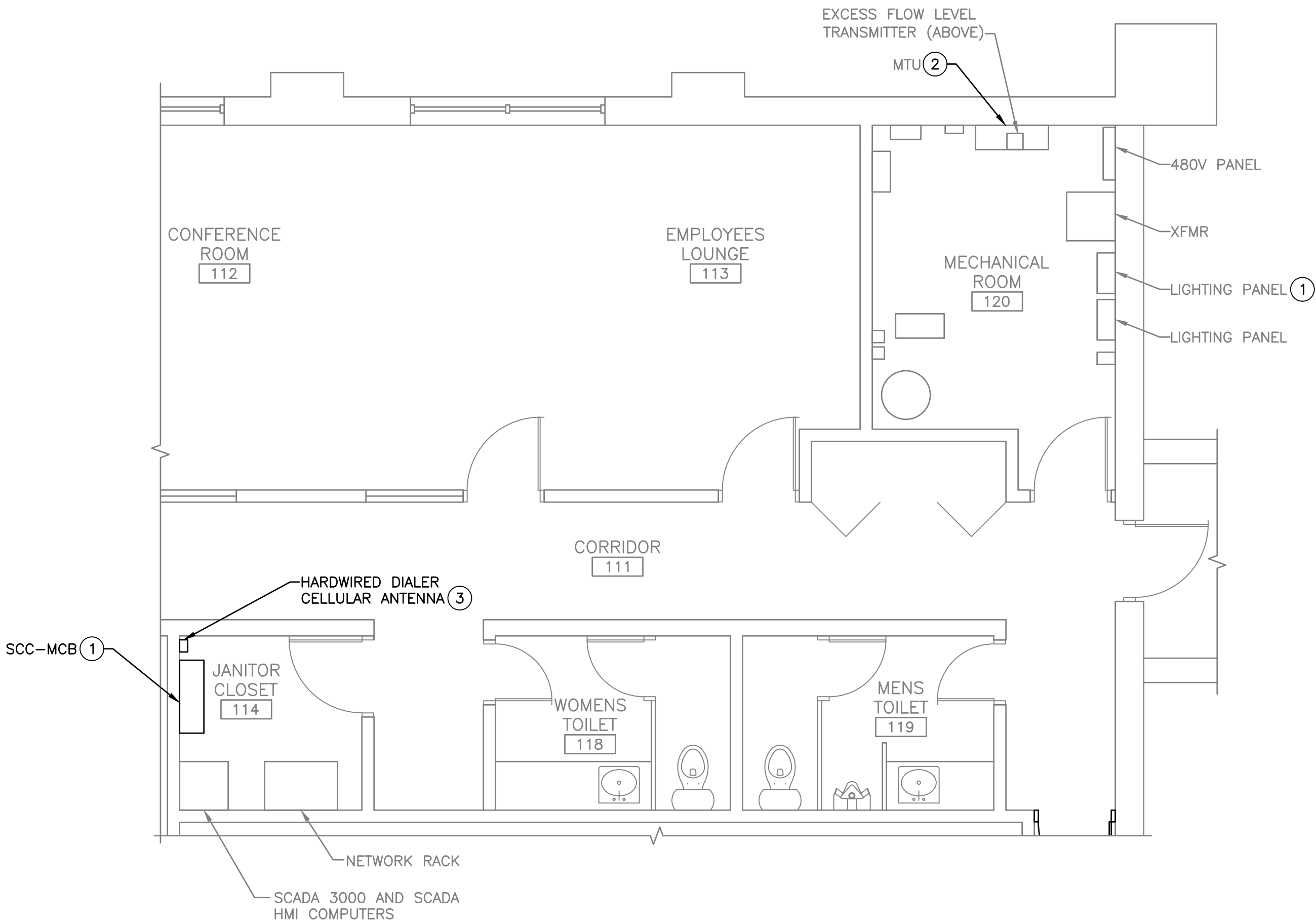
PROJECT MGR.
BRENT STUDNICKA

SA STRAND ASSOCIATES

SHEET
4
05-C1.01

- GENERAL NOTES:
- REFER TO SPECIFICATION SECTION 26 09 90 FOR WIRING ASSOCIATED WITH THE SCADA SYSTEM.
 - REFER TO SPECIFICATION SECTION 01 11 00 FOR INFORMATION ON CONSTRUCTION SEQUENCING.

- KEY NOTES:
- PROVIDE 2~#12 AND #12 GROUND IN 3/4" CONDUIT FROM AVAILABLE 15/1 BREAKER IN LIGHTING PANEL TO SCC-MCB FOR 120-VOLT POWER. UPDATE LIGHTING PANEL SCHEDULE.
 - REFER TO SPECIFICATION SECTION 26 09 00 FOR DEMO WORK ASSOCIATED WITH PANEL.
 - INSTALL ANTENNA CABLE FURNISHED WITH CELLULAR ANTENNA FROM ROUTER IN SCC-MCB TO ANTENNA.



ELECTRICAL PLAN

MAIN CONTROL BUILDING
ELECTRICAL PLAN

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

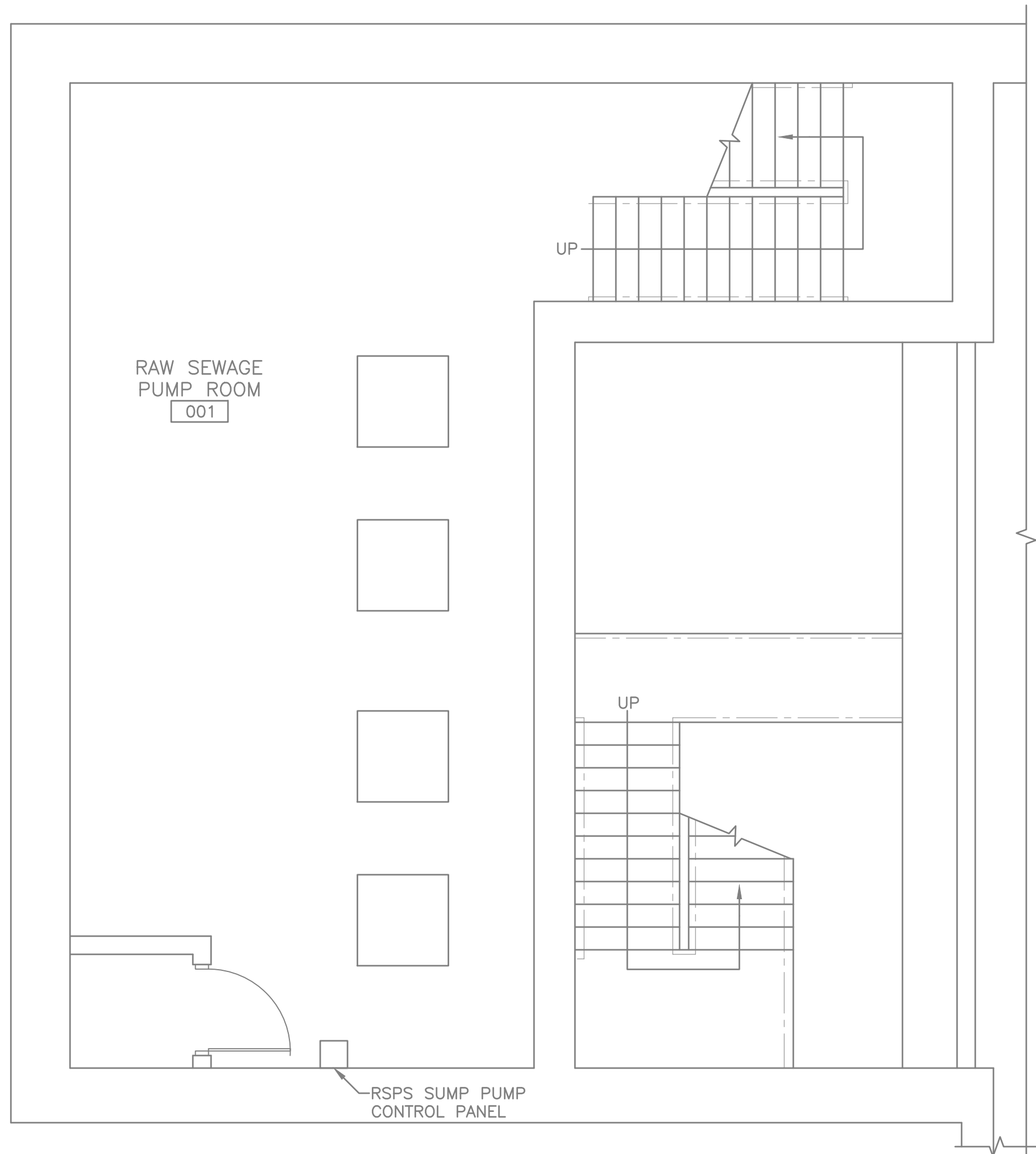
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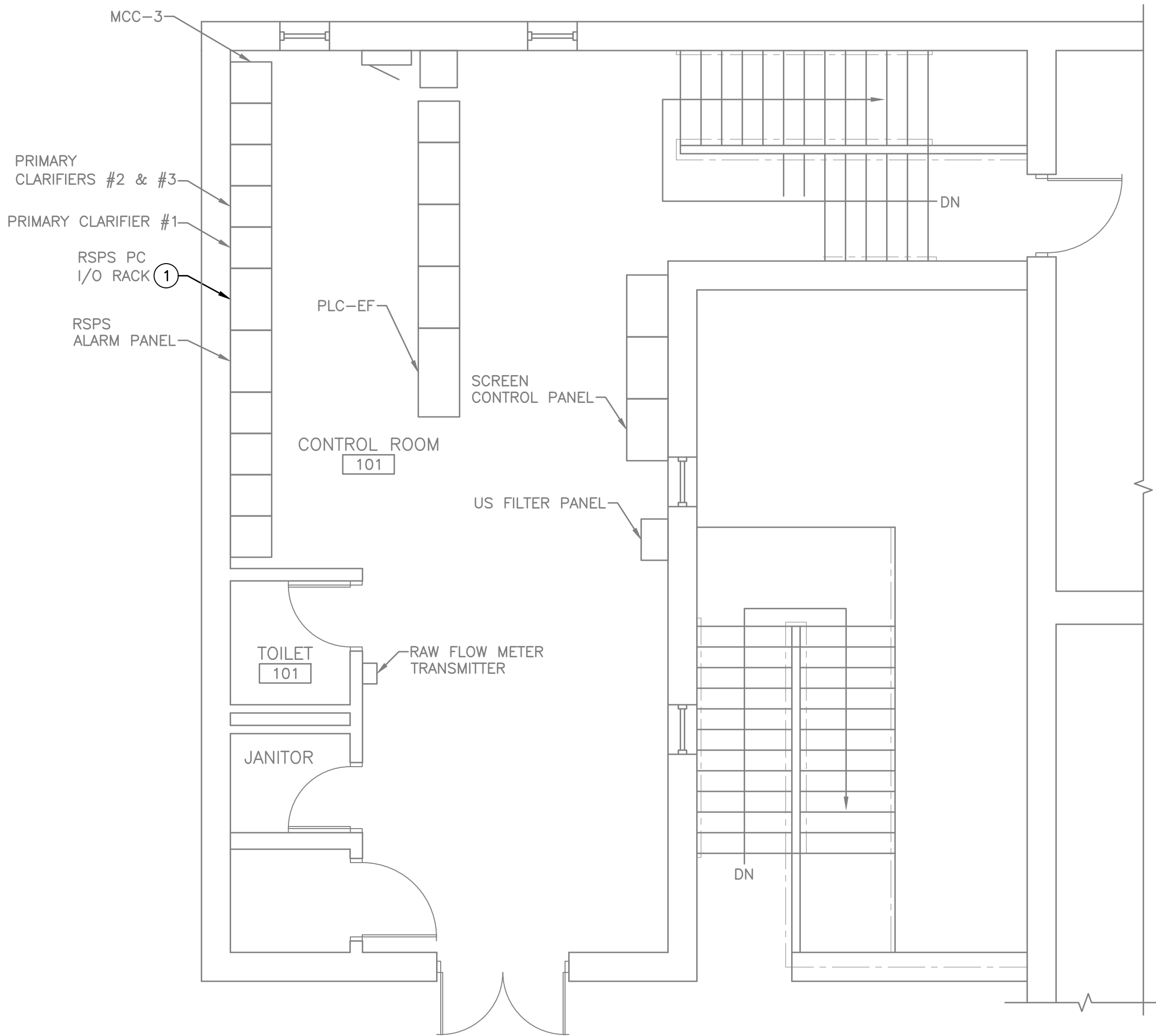
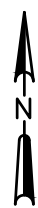


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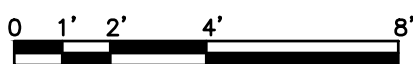
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LOWER LEVEL ELECTRICAL PLAN



UPPER LEVEL ELECTRICAL PLAN



GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 26 09 90 FOR WIRING ASSOCIATED WITH THE SCADA SYSTEM.
2. REFER TO SPECIFICATION SECTION 01 11 00 FOR INFORMATION ON CONSTRUCTION SEQUENCING.

KEY NOTES:

- ① REFER TO SPECIFICATION SECTION 26 09 00 FOR DEMO WORK ASSOCIATED WITH PANEL.

RAW SEWAGE PUMPING STATION
ELECTRICAL PLAN

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

JOB NO.
1586.003

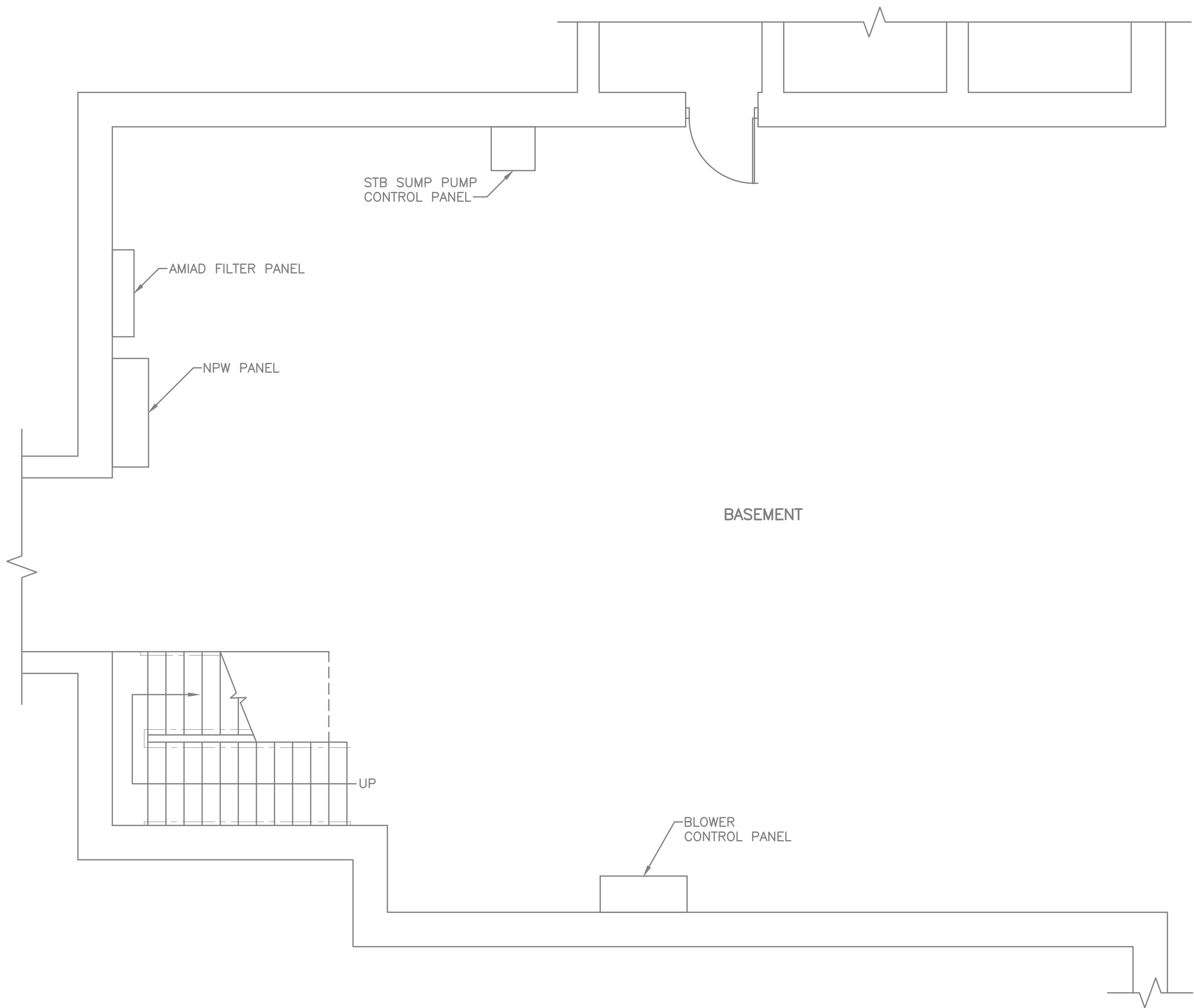
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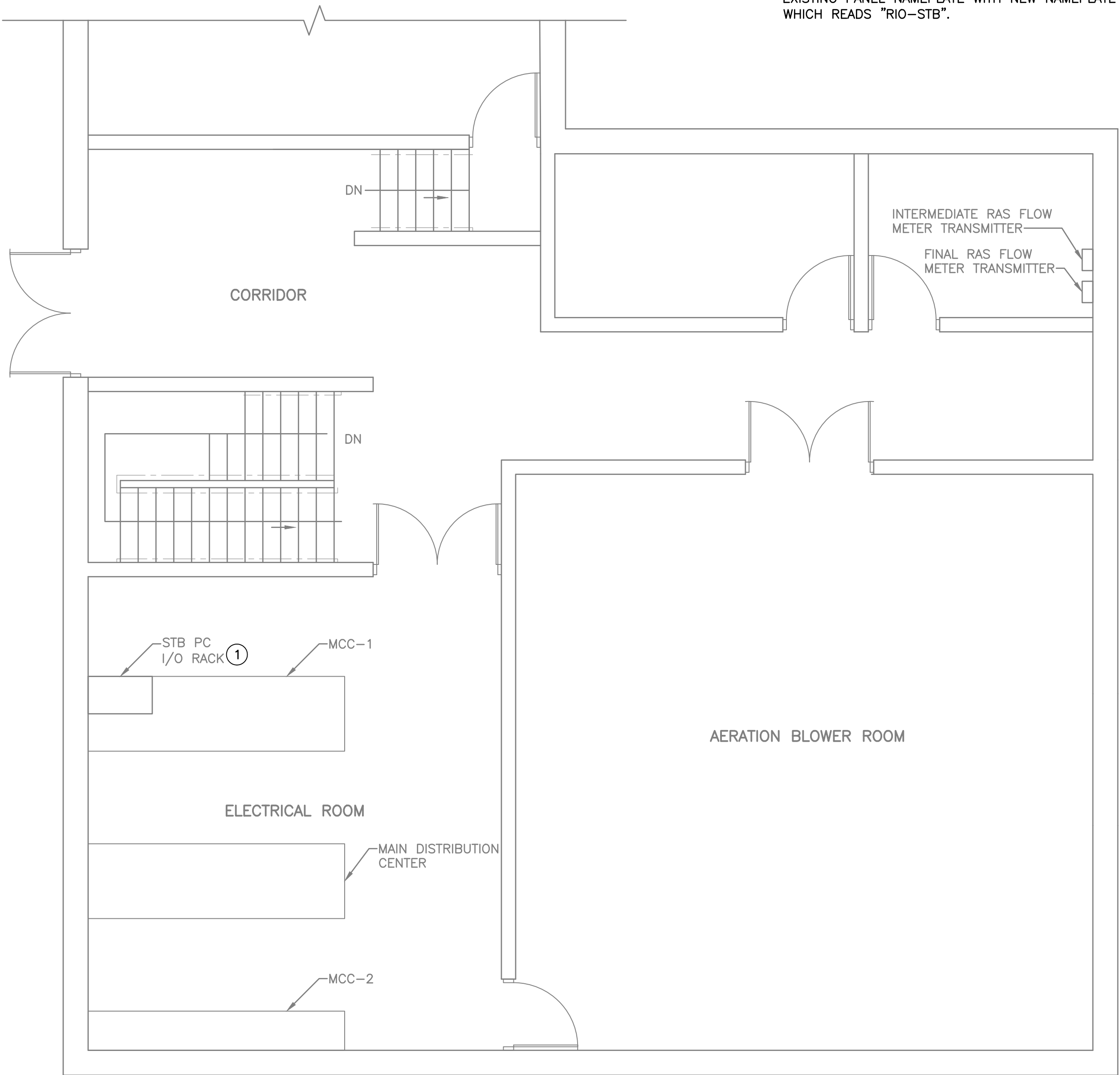
NO.	REVISIONS	DATE
1	ISSUED FOR BID	1/12/2024

- GENERAL NOTES:
- REFER TO SPECIFICATION SECTION 26 09 90 FOR WIRING ASSOCIATED WITH THE SCADA SYSTEM.
 - REFER TO SPECIFICATION SECTION 01 11 00 FOR INFORMATION ON CONSTRUCTION SEQUENCING.
- KEY NOTES::
- ① REFER TO SPECIFICATION SECTION 26 09 00 FOR DEMO WORK ASSOCIATED WITH PANEL. REPLACE EXISTING PANEL NAMEPLATE WITH NEW NAMEPLATE WHICH READS "RIO-STB".



LOWER LEVEL ELECTRICAL PLAN

0 1' 2' 4' 8'



UPPER LEVEL ELECTRICAL PLAN

0 1' 2' 4' 8'

SECONDARY TREATMENT BUILDING
ELECTRICAL PLAN

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

NO.	REVISIONS	DATE
1	ISSUED FOR BID	1/12/2024

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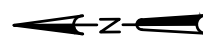
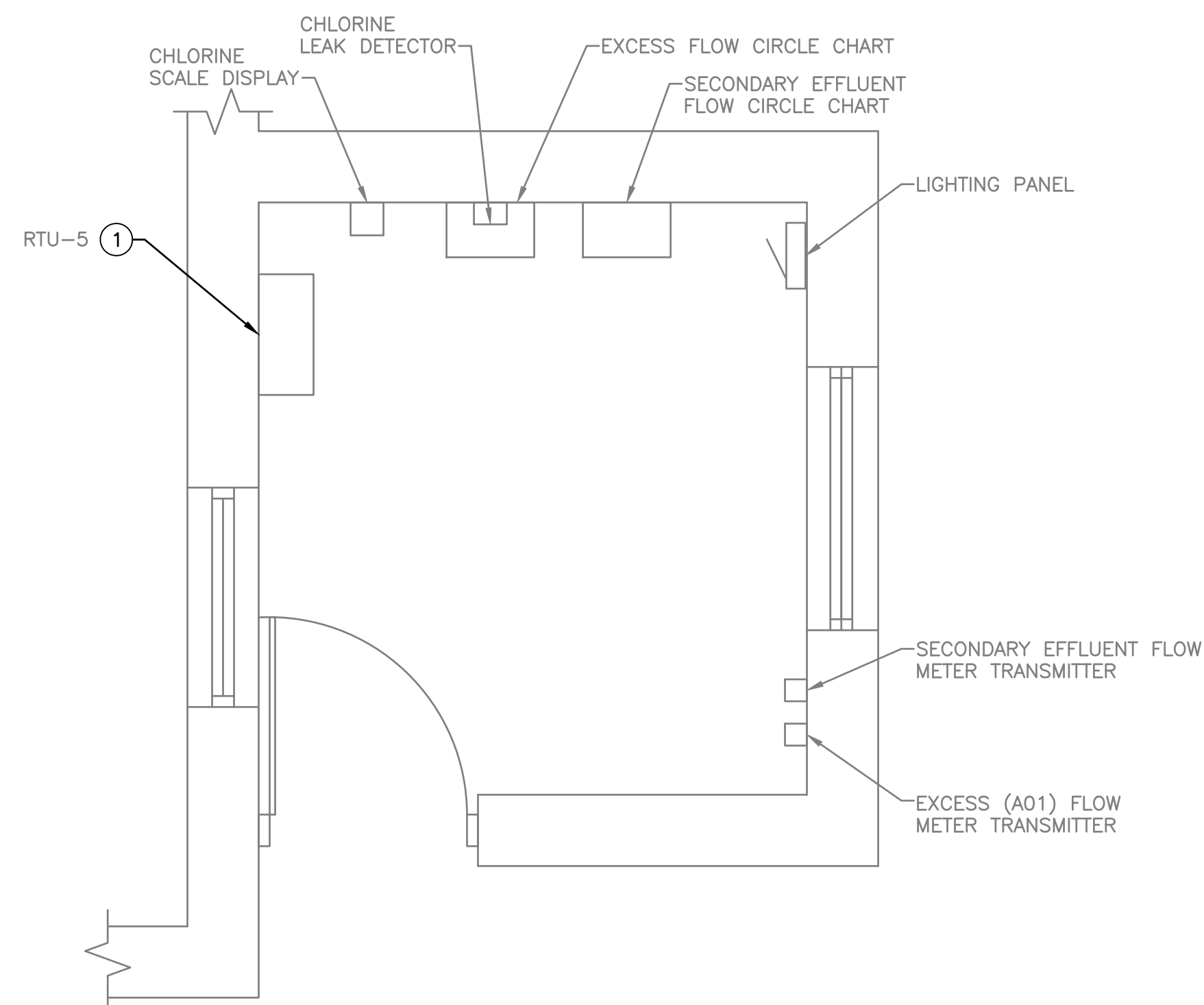
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20-E1.01

1. REFER TO SPECIFICATION SECTION 26 09 90 FOR WIRING ASSOCIATED WITH THE SCADA SYSTEM.
2. REFER TO SPECIFICATION SECTION 01 11 00 FOR INFORMATION ON CONSTRUCTION SEQUENCING.

① REFER TO SPECIFICATION SECTION 26 09 00 FOR DEMO WORK ASSOCIATED WITH PANEL. REPLACE EXISTING PANEL NAMEPLATE WITH NEW NAMEPLATE WHICH READS "RIO-CL2".

[illegible]

CHLORINE BUILDING ELECTRICAL PLAN

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

JOB NO.
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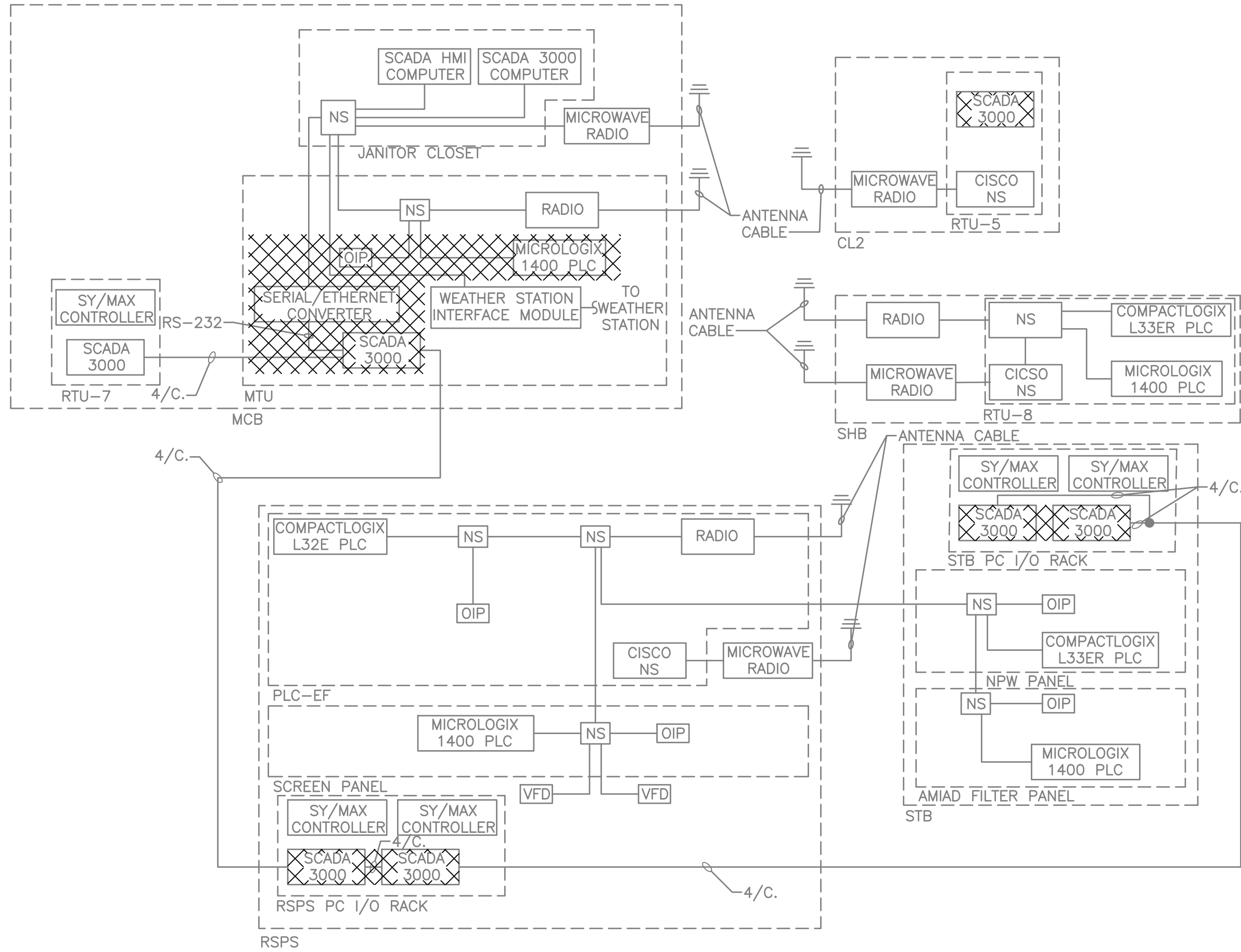
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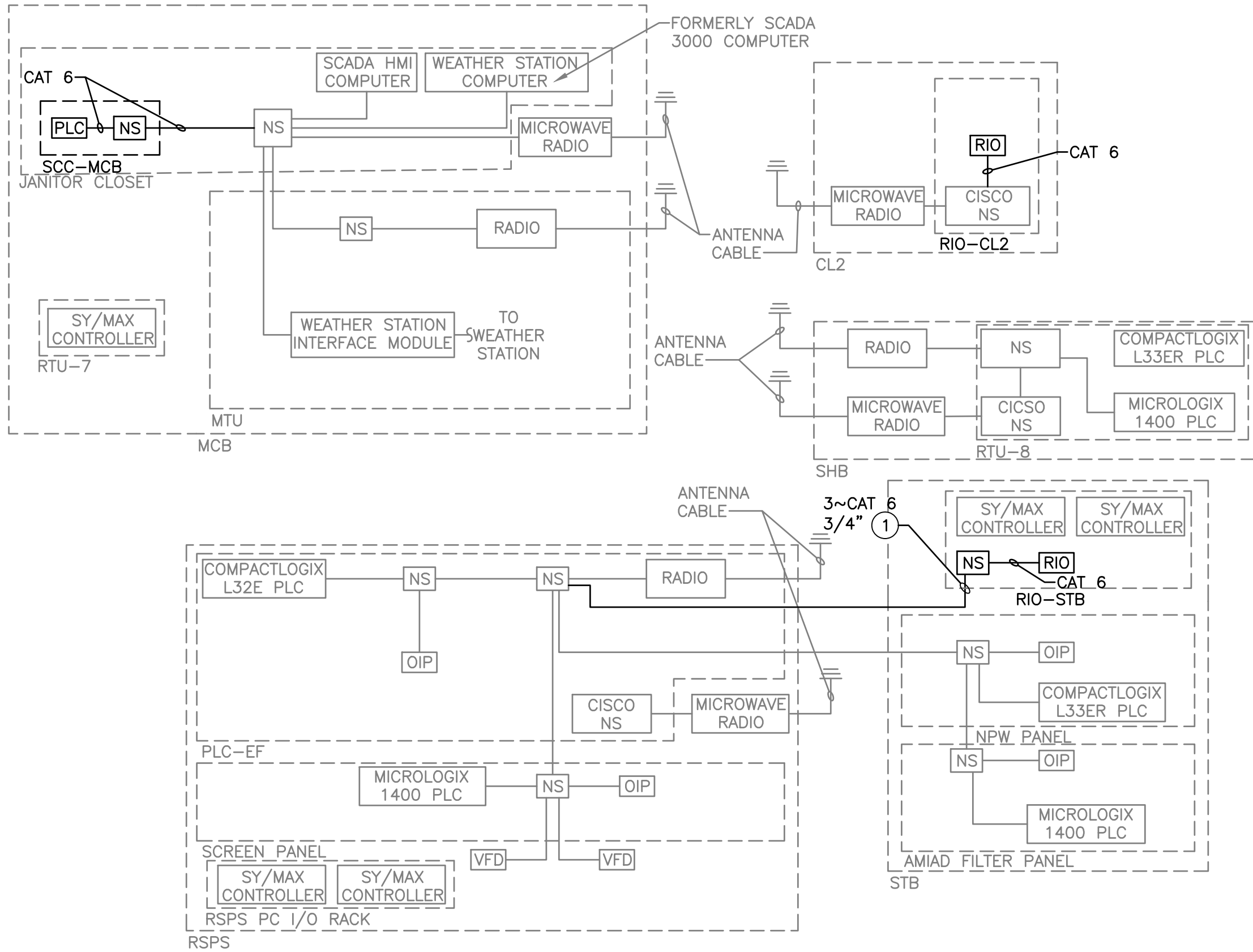
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KEY NOTES:
① CONDUIT SHALL BE ROUTED THROUGH EXISTING TUNNEL BETWEEN THE RSPS AND THE STB.



EXISTING SCADA RISER
NO SCALE



PROPOSED SCADA RISER
NO SCALE

- LEGEND:
- NS NETWORK SWITCH
 - OIP OPERATOR INTERFACE PANEL
 - PLC PROGRAMMABLE LOGIC CONTROLLER
 - CAT 5 CABLE (UNLESS OTHERWISE NOTED)
 - RIO REMOTE INPUT/OUTPUT

DATE:	1/12/2024
REVISIONS	
NO.	1

SCADA RISER DIAGRAMS

NORTH WWTP SCADA IMPROVEMENTS
VILLAGE OF ADDISON
DUPAGE COUNTY, ILLINOIS

JOB NO.
1586.003

PROJECT MGR.
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RFP RESPONSE
VILLAGE OF ADDISON
SCADA Improvements at the North Wastewater Treatment Plant
RFP NUMBER 24-1-1
Page 1 of 3

Purchasing Department
Village of Addison
1 Friendship Plaza
Addison, IL 60101-2786

Each Proposal submitted shall include a bid or lump sum bid relating to the Work to be performed. In preparing a Proposal, the bid or lump sum bid shall include any and all amounts to be charged by the respondent in connection with their Proposal for the Work specified.

In accordance with your “RFP Notice, RFP Conditions and Instructions, and RFP Specifications” for RFP 24-1-1, we will supply, after award of contract, said services at LUMP SUM BASE PRICE OF:

_____ Dollars
(Words)

\$ _____
(Numbers)

Respondent shall circle the manufacturer’s name for the following items of equipment proposed in Respondent’s Lump Sum Base Price:

Equipment	Manufacturer
Controls and Instrumentation (Section 26 09 00)	L.W. Allen – Altronex OR Integrated Process Solutions OR Red Automation OR Wunderlich-Malec

RFP RESPONSE
SCADA Improvements at the North Wastewater Treatment Plant
RFP NUMBER. 24-1-1
Page 2 of 3

Respondent shall initial below their acknowledgement of:

_____ Substantial Completion Date shall be December 2, 2024.

_____ Final Completion Date shall be 30 days following Substantial Completion Date.

COMPANY NAME: _____

LICENSE NO.: _____

ADDRESS: _____

TELEPHONE NO.: _____

SIGNATURE: _____

PRIMARY CONTACT/TITLE: _____

-Acceptance-

Date of Board of Trustee Approval: _____

VILLAGE OF ADDISON, a

Municipal Corporation

By: _____

Rich Veenstra, Mayor

RFP RESPONSE
SCADA Improvements at the North Wastewater Treatment Plant
RFP NUMBER. 24-1-1
Page 3 of 3

ATTEST:

Lucille A. Zuccherro, Village Clerk

Acceptance of a RFP is not a binding contract. This RFP becomes a contract binding upon the person, partnership or corporation, to provide services or equipment as specified, and the Village of Addison to accept these services or equipment, only when the Village Board approves a written contract by ordinance or motion.

AIA® Document A201® – 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

VILLAGE OF ADDISON GENERAL CONDITIONS FOR ALL PROJECTS

THE OWNER:

(Name, legal status and address)

Village of Addison
1 Friendship Plaza
Addison, IL 60101

THE ARCHITECT:

(Name, legal status and address)

As identified in the A101 Agreement between Owner and Contractor

* For purposes of this Agreement, the term "Architect" is synonymous with and used interchangeably with the term "Engineer" elsewhere in the Contract Documents, and this Agreement is intended apply to all engineering and design services provided in connection with each Project

TABLE OF ARTICLES

1	GENERAL PROVISIONS
2	OWNER
3	CONTRACTOR
4	ARCHITECT
5	SUBCONTRACTORS
6	CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
7	CHANGES IN THE WORK
8	TIME
9	PAYMENTS AND COMPLETION
10	PROTECTION OF PERSONS AND PROPERTY
11	INSURANCE AND BONDS
12	UNCOVERING AND CORRECTION OF WORK

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES



Init.

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(Topics and numbers in bold are Section headings.)

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Master Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Project Work Order Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements. The Project Work Order shall take precedence over terms and conditions in the Master Agreement.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means all of the Contractor's duties under the Contract Documents and any Project Work Order, including the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project under a Project Work Order.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the applicable Project Work Order may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

Under the Project Work Order, the Initial Decision Maker, if any, is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as

binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.2.4 If any two or more provisions of the Contract Documents conflict, and such conflict relates to the quantity or quality of the Work, the Contractor agrees to provide the greater quantity and/or better quality of such Work.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights claimed by the owner(s) and any licensee(s) who have an interest in and to the Instruments of Service.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the owner(s) and any licensee(s) who have an interest in and to the Instruments of Service.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties may agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. If the parties agree to protocols governing the transmission and use of Instruments of Service and other documents in digital form, the parties will use AIA Document E203™-2013,

Building Information Modeling and Digital Data Exhibit, or another form based on written agreement of the parties to establish these protocols for the development, use, transmission, and exchange of digital data.

(Paragraphs deleted)

§ 1.8 Reserved.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall, to the extent allowed by law and by the Owner's policies and procedures, have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 Reserved.

§ 2.2 Reserved.

§ 2.2.1 Reserved.

§ 2.2.2 Reserved.

§ 2.2.3 Reserved.

§ 2.2.4 Where the Owner has furnished any information or documents to the Contractor in connection with the Project, the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, insurers, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. The Contractor shall provide information or other assistance as the Architect or Owner may request in connection with these obligations.

§ 2.3.2 As appropriate for the Project, the Owner shall retain an architect and/or engineer lawfully licensed to practice architecture and/or engineering, or an entity lawfully practicing architecture and/or engineering, for any such architectural or design services in addition to or in furtherance of the submittals, except to the extent that such submittals include specialized Work to be performed by Contractor under Section 1.1.3, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 Reserved.

§ 2.3.4 Upon written request by the Contractor, the Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and

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relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3. The Owner's rights and remedies under this section are in addition to, and not a limitation of, any other rights and remedies of the Owner under the Contract Documents or otherwise.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or approved construction schedules, and fails within a five-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default, neglect, or failure. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and reasonable attorneys' fees, and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner within thirty (30) days after a request by the Owner.

§ 2.6 Owner's Right to Audit. The Contractor shall keep full and accurate records of all labor and material costs incurred and items billed in connection with the performance of the Work, which records shall be open to inspection, copying, and audit by the Owner or its authorized representatives during performance of the Work and until three years after Final Payment.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative. The Contractor is an independent contractor and shall not be deemed an agent of the Owner for any reason.

§ 3.1.2 The Contractor shall perform the Work in strict accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in strict accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 The Contractor represents that it has visited the Project site, become generally familiar with local conditions under which the Work is to be performed, correlated personal observations with requirements of the Contract Documents, including the Project Work Order, and has satisfied itself as to the nature and location of the Work, the general and local conditions, including those bearing upon access (including partial or total restrictions on access), transportation, delivery, disposal, staging, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, ground water table or similar physical conditions of the ground, the character, quality and quantity of existing conditions to be encountered, the character of equipment and facilities needed prior to and during the prosecution of the Work and all other matters which can in any way effect the Work or the cost thereof under this Agreement. Any failure by the Contractor to acquaint itself with all the available

information concerning these conditions will not relieve the Contractor from any obligation under the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor or its Subcontractors or suppliers as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect and Owner any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.2.5 In all cases where Work interconnects with existing facilities, Contractor shall field measure and verify at the site all dimensions relating to such existing facilities. Any conflicts in the Work and the existing facilities which could have been mitigated by the Contractor's obligation to verify the dimensions of the existing facilities shall be promptly rectified by the Contractor at its own expense, and such obligation does not limit the Owner's other rights and remedies under the Contract Documents.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose to Owner and Architect alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. The Contractor shall not proceed performing the Work using its alternative means, methods, techniques, sequences, or procedures without written approval of the Owner through the Architect.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.3.4 The Contractor shall coordinate inspections by governmental authorities having jurisdiction over the Work.

§ 3.3.5 No inspection performed or failed to be performed shall be a waiver of any of the Contractor's obligations hereunder.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the written consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.4.4 The Contractor shall not at any time permit on the Project site any alcohol or controlled substances whether inside or outside of buildings or structures. Possession or use of any of the foregoing at or adjacent to the site shall obligate the Contractor to remove such offending personnel from the site and replace them at no additional cost to the Owner.

§ 3.4.5 The Contractor and any Subcontractors shall conform to labor laws of the State and various acts amendatory and supplementary thereto and to other laws, ordinances and legal requirements applicable thereto. Contractor shall enforce among all personnel directly or indirectly employed by it, and among all Subcontractors and their employees, all rules which the Owner may establish for conduct of such personnel on the site.

§ 3.4.6 The Contractor shall pay prevailing wages in accordance with and shall fully comply with all requirements of the Prevailing Wage Act, 820 ILCS 130/0.01, *et seq.*, including those set forth in Section 13.1.3.1 herein. This Agreement calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/0.01 *et seq.* ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates, and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All Contractors, Subcontractors, and sub-subcontractors rendering services under this Agreement must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work shall strictly conform to the requirements of the Contract Documents and shall be free from defects. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Owner is tax-exempt. Notwithstanding, the Contractor shall pay any applicable sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 Without assuming any design responsibilities, the Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, building codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or those that should have been reasonably discovered by Architect in accordance with the Standard of Care to be exercised by the Architect prior to commencement of the Work or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both, to be approved by Owner. If the either Architect or Owner determines that the conditions at the site are not materially different from those indicated in the Contract Documents or Submittals, and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall immediately notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection. Notwithstanding any provision of the Contract Documents to the contrary, any use of an allowance account is subject to the written pre-approval of the Owner.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and

- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work on site. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The superintendent shall be subject to approval by the Owner and shall not be replaced without the prior written consent of the Owner. The Owner shall have the right to require that the Contractor replace the superintendent, at no additional cost to the Owner, at any time during the duration of the Work if his/her performance is not satisfactory to the Owner.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Owner or Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Owner and Architect to provide notice within the 14-day period shall constitute notice of no initial objection but shall not affect Owner's right to make a subsequent rejection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.1.1 The Contractor's construction schedules shall be in a bar chart format, and shall depict, at a minimum, activity identification and durations, critical path, float, early start, early finish, late start, and late finish.

§ 3.10.1.2 The float in the construction schedules will not be deemed exclusively available to the Contractor or Owner, but rather shall be available to either party as needed.

§ 3.10.1.3 No less than once per month, the Contractor shall submit an updated construction schedule. The updated construction schedule shall depict actual start and completion dates for Work commenced and, if appropriate, Work completed. Additionally, the updated construction schedules shall depict updated estimates of anticipated commencement and completion dates for all upcoming Work.

§ 3.10.1.4 The Contractor's submission of the initial construction schedule and monthly schedule updates shall be conditions precedent to certification of the Contractor's application for payment.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect. If the Contractor fails to adhere to the approved construction schedule(s), Contractor shall

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immediately, at its own expense, take necessary measures to remedy such failure, including addition of personnel and/or equipment, overtime, and/or additional shifts. The Owner shall be entitled to rely on Contractor's schedules for coordination of its own activities, as well as the activities of other contractors working at the Project site or on the Project.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals (collectively the "As-Built Documents"). These As-Built Documents shall be in electronic form or paper copy, available for review by the Architect or Owner upon reasonable notice, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed. Adequate maintenance of the As-Built Documents shall be a condition precedent to certification of the Contractor's applications for payment.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Architect has specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to the site access plan, if any, and to the areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. Throughout the progress of the Work the Contractor shall continually remove from the Project Site and from any adjacent property, all waste, scraps, tools, equipment, storage facilities, machinery, trailers, and vehicles no longer required for prosecution of the Work, such that the Project site remains clean, orderly, and safe.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, or the Contractor has reason to believe that the required design, process, or product is an infringement, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees and litigation expenses (including expert witness fees), arising out of or resulting from performance of the Work, but only to the extent caused by Contractor's breach of contract or by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18. The obligations of the Contractor under this Section 3.18 shall not extend to the liability of the Architect, the Architect's consultants, and agents and employees of any of them arising out of (1) the preparation or approval of Drawings, opinions, Change Orders, Specifications, or Property Surveys., or (2) the giving of or the failure to give directions or instructions in accordance with the Standard of Care to be exercised by the Architect, the Architect's consultants, and agents and employees of any of them with respect to design.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

§ 3.18.3 "Claims, damages, losses and expenses" as these words are used herein shall be construed to include, but not be limited to (1) injury or damage resulting from the failure of or use or misuse by Contractor, its Subcontractors, agents, servants or employees, of any hoist, rigging, blocking, scaffolding, or any and all other kinds of items of equipment, whether or not the same be owned, furnished or loaned by Owner; (2) all attorneys' fees and costs incurred in defense of the claim or in bringing an action to enforce the provision of this Indemnity or any other indemnity contained in the Contract Documents, including the fees charged by the indemnitee's expert witnesses; and (3) all costs, expenses, lost time, opportunity costs and other similar indirect or incident damages incurred by the party being indemnified or its employees, agents or consultants.

§ 3.18.4 In the event that the Contractor or its Subcontractors are requested to, but refuse to, honor the indemnity obligations hereunder or to provide a defense, then in addition to all other obligations hereunder, the Contractor and its Subcontractors shall reimburse the Owner and Architect the cost of any legal action concerning Contractor's or Subcontractor's duty to defend and indemnify under this Agreement, including attorneys' fees, time expended, costs and expenses.

§ 3.18.5 The Contractor hereby knowingly and intentionally waives the right to assert, under the case of *Kotecki v. Cyclops Welding Corp.*, 146 Ill.2d 155 (1991), that Contractor's liability may be limited to the amount of its statutory liability under the Workers' Compensation Act, and agrees that Contractor's liability to indemnify and defend the Owner and Architect is not limited by the so called "Kotecki Cap". The Contractor shall include this provision in each of its Subcontract agreements and shall require its Subcontractors to be so bound.

§ 3.18.6 The Contractor shall include in each and every Subcontract with any and all Subcontractors and/or material suppliers performing Work and require each and every Subcontractor and/or material supplier performing Work to agree to be bound by all of the provisions 3.18.1 through 3.18.10 under the Contract Documents.

§ 3.18.7 The Contractor's indemnity obligations hereunder shall specifically include all claims and judgments which may be made against the indemnitees under federal or state law or the law of the other governmental bodies having jurisdiction, and further, against claims and judgments arising from violation of public ordinances and requirements of governing authorities due to Contractor's or Contractor's employees' method of execution of the Work.

§ 3.18.8 The provisions of this Section 3.18 are not intended to conflict in any way with the Construction Contract Indemnification for Negligence Act, 740 ILCS 35/0.01 *et seq.* and shall be interpreted in accordance therewith.

§ 3.18.9 The Contractor shall indemnify and hold harmless the Owner in the event of labor or trade union conflicts or disputes between the Contractor and Subcontractors and their respective employees. The Contractor shall endeavor to adjust and resolve such conflicts and disputes which affect the timely completion of the Work. Such conflicts or disputes shall not be a basis or excuse for the breach of the Contract Documents by the Contractor or its Subcontractors, and shall not provide the Contractor with relief from complying with dates for Substantial Completion or Final Completion. Labor or trade union disputes that affect production or delivery of materials or equipment, or the installation, shall be at no cost to the Owner. The Contractor shall notify the Architect and the Owner in writing as soon as possible as to any labor or trade disputes which may affect the Work and its timely completion. In such event, the Contractor shall provide a written proposal to the Architect and the Owner which includes any comparable substitution(s) necessary to complete the Work.

§ 3.18.10 None of the foregoing provisions shall deprive the Owner or the Architect of any action, right or remedy otherwise available to them or either of them at law.

§ 3.19 If the Work is to be performed by trade unions, the Contractor shall make all necessary arrangements to reconcile, without delay, damage, or cost to the Architect or the Owner, any conflict between the Contract Documents and any agreements or regulations of any kind at any time in force among members or councils which regulate or distinguish what activities shall not be included in the Work of any particular trade. Such arrangements are subject to written pre-approval of Owner and Architect. In case the progress of the Work is affected by any undue delay in furnishing or installing any items or materials or equipment required under the Contract Documents because of the conflict involving any such agreement or regulation, the Architect may require that other material or equipment of equal kind and quality be provided at no additional cost to the Owner.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement or the Contract Documents.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended unless done so in the manner prescribed by the Owner and Architect's agreement.

§ 4.2 Administration of the Contract

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or

for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

The Owner and Contractor shall endeavor to include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect and the Owner each have authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner or Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance of the information given with the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The authority of the Architect's Project representative is limited by the Owner's policies and procedures, and by the terms and conditions of the agreement between the Owner and Architect. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents and if approved in writing by the Owner.

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 If this Project is utilizing a construction manager at-risk, then when the lowest, responsive and responsible multiple prime trade bidder(s) are identified and awarded contracts by the Owner, each such award shall constitute the automatic assignment of that trade contract by the Owner to the construction manager, who is also known as the "Contractor". Each such successful bidder shall then be known as a "Subcontractor." If this Project is utilizing a single general contractor or multiple prime trade contractors, and the Project is not utilizing a construction manager-at-risk, then there shall be no such assignment. In any case, a Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Reserved.

(Paragraphs deleted)

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect.

Each Subcontractor acknowledges: (1) that the Owner is a direct intended third party beneficiary of each Subcontract between the Contractor and Subcontractor; (2) that notwithstanding any contract provision to the contrary, Subcontractor shall be bound to perform the Work in accordance with these AIA A201 General Conditions, as amended; and (3) that the Subcontractor is not a third-party beneficiary of any contract between Contractor and Owner.

Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will

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be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

- § 5.4.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that
- .1 assignment is effective only after termination of the Contract Work under the applicable Project Work Order by the Owner, and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
 - .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Reserved.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity, and upon such further assignment, the Owner shall have no further liability to such subcontractor.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project or other construction or operations on the site with the Owner's own forces, and with Separate Contractors. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

(Paragraph deleted)

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. Subject to Article 15, the

Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 Reserved.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 The Owner may, without invalidating the Contract and without notice to the surety, direct changes in the Work. Changes in the Work may be accomplished after execution of the applicable Project Work Order, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.1.4 No Change Order shall be approved or paid unless preceded by a written direction for the Change Order is provided by the Owner. This requirement cannot be waived by conduct, custom, or practice with respect to this Project or other projects. There shall be no implied or constructive change orders.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.2 No payment for changes in the Work shall be made until such change has been memorialized in an executed Change Order and the Change has been executed.

§ 7.2.3 If the Contractor is also the Project's Construction Manager pursuant to a separate construction management agreement with the Owner, the Contractor shall not be permitted any markup on Change Orders or compensation with respect to Change Orders, other than as may be provided in such construction management agreement. The Subcontractors, and any Contractor who is not serving as Construction Manager for the Project, shall be entitled to the following markups for additive Changes Orders, and shall be required to take the following mark-downs for deductive Change Orders. Additional markup for insurance or bonds will not be allowed. All Change Order requests must be submitted with the following backup information or they will not be reviewed or processed by the Architect or Owner: material and labor quantities, material unit costs, labor rates, and any other substantiating data to explain and substantiate the Change Order amount.

Markups and Markdowns for Change Orders:

Additive Change Order: 10%

Deductive Change Order: 10%

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order for the purposes of defining the change and/or how any payment shall be calculated, but not for the purpose of approving payment.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation, with markups for overhead and profit as permitted by the Contract Documents;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in Section 7.2.3, except for emergencies as provided in Section 10.4, in which case Contractor shall not be entitled to overhead and profit. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect these costs, shall be computed at the Comprehensive Trade Rates attached as an exhibit to the Project Work Order;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others, as set forth in Contractor's Equipment Rental Rates and Practices, attached as an exhibit to the Project Work Order;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change, computed at the Comprehensive Management Rates attached as an exhibit to the Project Order.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Upon execution by the Owner, such agreement shall be effective and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase or net decrease, if any, with respect to that change.

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§ 7.3.9 Reserved.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Project Work Order, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner for the Work under the Project Work Order..

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time under the Project Work Order. The Contractor shall achieve Final Completion within thirty (30) days following Substantial Completion.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by a cause that (1) was reasonably unforeseeable to the Contractor; and (2) is not within the Contractor's control, then the Contract Time shall be equitably extended and such extension shall be reduced to a Change Order.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 Extension of Contract Time under the Project Work Order pursuant to this Article 8 shall be the Contractor's sole and exclusive remedy for delay.

§ 8.3.4 Extension of Contract Time under the Project Work Order resulting from Changes in the Work shall be negotiated into respective Change Orders. Whenever the Contractor seeks an adjustment in the Contract Time as part of a Claim or Change Order, the Contractor shall justify the request with proper written reference to the approved construction schedules. All executed Change Orders shall be deemed to include adjustments in the Contract Time, if any, resulting from the underlying Change in the Work.

§ 8.3.5 In addition to other rights and remedies set forth elsewhere in the Contract Documents, the Contractor shall reimburse the Owner for all Architect's fees and expenses for additional services necessitated by (1) Contractor's failure to achieve Substantial Completion within the time established in the Contract Documents; (2) for more than one inspection to determine Substantial Completion; and (3) for more than one inspection to determine Final Completion.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents. If the Contractor is also the construction manager pursuant to a construction management agreement with the Owner, that agreement contains any and all additional compensation payable to the Contractor in its role as construction manager.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated for any one item of material or equipment are changed by more than 25% in a proposed Change Order or Construction Change Directive, the applicable unit prices shall be equitably adjusted in such Change Order or Construction Change Directive.

§ 9.2 Schedule of Values

The Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various Subcontracts. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, requested by the Architect. Each section of the schedule organized by Subcontract shall further allocate each Subcontractor's Work into discrete tasks with values corresponding to each task. The total of all values for all tasks for all Subcontractors shall equal the Contract Sum. Portions of the Work not subcontracted shall be allocated into discrete tasks and corresponding values. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment. Approval by the Owner of the schedule of values (and revisions thereto) shall be a condition precedent to certification of Contractor's applications for payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, including copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents. The Contractor's inclusion in an Application for Payment of an amount owed to a Subcontractor shall constitute the Contractor's certification to the Owner that such Subcontractor is entitled to payment in that amount, and that there are no backcharges, Claims, or other disputes then pending or anticipated which may impact that Subcontractor's right to such payment. Contractor shall submit all Applications for Payment in a consistent format.

§ 9.3.1.1 Such applications may include requests for payment on account of changes in the Work that have been properly authorized by Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor has not approved payment to a Subcontractor or supplier, unless such Work has been performed by others and the Contractor has approved said payment.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials

and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.3.4 All Applications for Payment shall be accompanied by lien waivers from the Contractor and applicable Subcontractors. The lien waivers, when taken together, shall equal the sum due and paid under the immediately preceding Application for Payment, and shall be effective through the submittal date of the immediately preceding Application.

§ 9.3.5 All Applications for Payment shall be accompanied by the Contractor's and Subcontractors' certified payrolls as required by the Illinois Prevailing Wage Act, 820 ILCS 130/5.

§ 9.3.6 Submission of properly executed lien waivers and the certified payrolls are conditions precedent to certification of each Application for Payment.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be Made, or if any other condition precedent to payment has not occurred. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;

- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 If Contractor disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, Contractor may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in accordance with the Local Government Prompt Payment Act, 50 ILCS 505/1, et seq. and as may be otherwise provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law. In the sole discretion of the Owner, if the Contractor fails to furnish evidence as required by this Section, the Owner has the right, but not the obligation, to pay Subcontractors and suppliers directly.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If at any time there is evidence of any liens or claims for which the Owner may become liable, the Owner shall have the right to

retain, out of any payment due or thereafter to become due to Contractor or a Subcontractor, an amount sufficient to completely indemnify and defend the Owner from and against such lien or claim, including any reasonable attorneys' fees and litigation expenses that have been or may be incurred by the Owner. Should any such evidence be established after all payments are made, the Contractor or Subcontractor shall repay the Owner all sums which the Owner may be compelled to pay in discharging such lien or claim, including all reasonably attorneys' fees, litigation expenses, and other costs resulting from such lien or claim.

§9.6.9 The Owner shall withhold ten percent (10%) from all progress payments to the Contractor as retention. The Contractor shall request retention with its final Application for Payment as provided in Section 9.10. No interest shall accrue on monies held in retention. Contractor shall ensure that each contract between Contractor and each Subcontractor contains this same provision for the withholding and release of retention.

§ 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use without any interference resulting from Contractor's operations or from incomplete work. The Work is not substantially complete until all Project systems included in the Work are operational as designed and scheduled, all required governmental inspections and certifications have been made and obtained, designated instruction of the Owner's personnel in the operation of systems has been completed and documented, and all final finishes required by the Contract Documents have been installed. The Work is not substantially complete until the Contractor has submitted the following items to the Owner or Architect:

1. All As-Built Documents in conformance with the Contract Documents and the requirements of this Agreement;
2. All operations and maintenance manuals as required by the Contract Documents;
3. All manufacturers' warranties as required by the Contract Documents; if such warranties cannot be executed until the Certificate of Substantial Completion is executed, the Contractor shall submit a warranty specimen as a condition of Substantial Completion, and shall submit the fully executed warranty prior to Final Completion.

If in the event Contractor does not complete remaining work within thirty (30) days of Substantial completion, Owner shall give the Contractor written notice of the remaining Work to be completed. If the Contractor fails to complete the remaining work to be completed within five (5) days of receipt of the written notice, the Owner reserves the right to complete the remaining Work in accordance with § 2.4 without further notice to the Contractor. All costs incurred by Owner therein shall be offset against Contractor's final payment.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final Payment, which shall be attached to the Certificate of Substantial Completion (the "Punch List"). Failure to include an item on the Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's Punch List, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's Punch List, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon

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notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion with the Punch List attached. The Certificate of Substantial Completion shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the Punch List accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate.

§ 9.8.6 Upon Substantial Completion, the Contractor and Subcontractors hereby assign all vendor and manufacturers' warranties to the Owner, if and to the extent any such warranty identified the Contractor or a Subcontractor, and not the Owner, as the entity to whom the warrantor is obligated.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a Punch List to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 All Work depicted on the Contractor's Punch List and thereafter identified in the Architect's inspection shall be completed by Contractor within thirty (30) days of issuance of the Certificate of Substantial Completion. Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate, including retention held pursuant to Section 9.6.9, is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents,

(4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, including those fully-executed warranties required by Section 9.8.1.1 to be furnished prior to final completion, and (6) final releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner, along with the final submittal of certified payroll as provided by Section 5 of the Prevailing Wage Act, 820 ILCS 130/5. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs, reasonable attorneys' fees, and litigation expenses.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, and shall not constitute a waiver of Claims.

Otherwise, if the Contractor does not complete remaining work within thirty (30) days after Substantial Completion, Owner may complete the remaining Work and backcharge the Contractor in accordance with Section 2.5. All related costs incurred by Owner shall be deducted from Contractor's final payment, and if the amount of Contractor's final Application for Payment is insufficient to cover such costs, Contractor shall pay such insufficiency to Owner upon demand.

§ 9.10.4
(Paragraphs deleted)
Reserved.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and specifically identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. Neither the Owner nor the Architect shall be responsible for any safety precautions or programs in connection with the Work.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss, including any orders and regulations resulting from an act of government declaring a national or state emergency that requires all Work to be stopped or causes delay in such Work.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings

against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If any person suffers injury or damage to person or property because of an act or omission of a party, or of others for whose acts such party is legally responsible, the responsible party shall give notice of the injury or damage, whether or not insured, to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 Without accepting any responsibility or liability for the remediation of hazardous materials that exist on or contiguous to the Project site as of the date of the Agreement, the Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume. By Change Order, the Contract Time shall be equitably extended.

§ 10.3.3 Reserved.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of

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the Contractor's fault or negligence in the procurement, delivery, unloading, loading, stockpiling, storing, preparing, installing, use and/or handling of such materials or substances (collectively, "handling").

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and faultily or negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 Reserved.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Except as otherwise provided herein, additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

In the event such an emergency is the result of any orders and regulations resulting from an act of government declaring a national or state emergency that requires all Work to be stopped or causes delay in such Work:

1. Additional extension of time claimed by the Contractor on account of the emergency shall be determined by Article 8 and Article 15.
2. Additional compensation claimed by the Contractor on account of the emergency shall be determined by Article 7.3.4 and Article 15.
3. Contractor shall be required to provide reasonable evidence to Owner demonstrating that such claims are the result of an emergency and Contractor's need to preserve the safety of persons or property in accordance with a national or state emergency declaration. Owner reserves the right to deny any such claim in the event Contractor has not provided sufficient reasonable evidence as determined by Owner in its sole discretion.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor, and the Subcontractors, to the extent applicable as specified below, shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in this Section 11.1 and its subparts and elsewhere in the Contract Documents. To the extent of any conflict between this Section 11.1 and other Contract Documents, the Contractor and Subcontractors shall purchase and maintain the insurance with the higher limits, broader coverage, and better protections for the Owner. The Contractor and Subcontractors shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. Such coverage shall be procured on an occurrence basis. Such coverage shall be procured from insurers with a Best's Key Rating Guide rating of at least A / VIII. The Owner, Architect, and Architect's consultants shall by endorsement be named as additional insureds under the Contractor's and each Subcontractor's commercial general liability policy, automobile liability policy, and excess or umbrella policy, all on a primary and noncontributory basis.

§ 11.1.1.1 Commercial general liability insurance including coverage for contractual liability and completed operations, explosion, collapse and underground hazards, covering personal injury, bodily injury and property damage, in the amount of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate.

§ 11.1.1.2 Automobile liability insurance, including hired, rented, and non-owned vehicles, covering personal injury, bodily injury and property damage, with a combined single limit of One Million Dollars (\$1,000,000).

§ 11.1.1.3 Umbrella / excess insurance coverage with a limit of at least Ten Million Dollars (\$10,000,000).

§ 11.1.1.4 Workers' compensation insurance in the amount of the statutory minimum with an employer's liability coverage of at least One Million Dollars (\$1,000,000).

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§ 11.1.1.5 The Contractor, and Subcontractors as applicable, shall maintain the insurance required by this Section 11.1 without interruption from the date of the Agreement until the date of final payment, and, with respect to their completed operations coverage, until three (3) years after Substantial Completion of Work, or for such other period for maintenance of completed operations coverage as specified in the Contract Documents, whichever is greatest.

§ 11.1.1.6 Prior to commencement of the Work, and again prior to the expiration of any policy, the Contractor and all Subcontractors shall furnish to the Owner and Architect certificates of insurance, policy declarations, all policy endorsements, and if requested by the Owner the policies, all reflecting the insurance required by this Section 11.1. An additional certificate and endorsements evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted by Contractor and all Subcontractors with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the time permitted for expiration. If any aggregate limit is reduced on account of claims paid, Contractor and Subcontractor shall immediately notify the Owner and Architect in writing of the amount of such reduction.

§ 11.1.1.7 Failure of either the Architect or Owner to demand certificates of insurance and/or policies and/or endorsements shall not constitute a waiver of the Contractor's and Subcontractor's responsibilities under this Section 11.1. Nor shall review and/or approval by either the Owner or Architect in any way relieve Contractor or any Subcontractor of its responsibility for furnishing sufficient insurance.

§ 11.1.1.8 Liability of Contractor or Subcontractor is not limited by these insurance requirements or by actual insurance coverage. Nothing related to insurance requirements in the Contract Documents is to be construed as limiting the liability of the Contractor, the liability of any Subcontractor of any tier, or the liability of the Architect, or any of their respective insurance carriers. Owner does not represent that the coverages or limits of insurance specified are sufficient or adequate to protect the Owner, Contractor, Architect, or any Subcontractor's interest or liabilities, but are merely minimums.

§ 11.1.1.9 Each Subcontractor shall comply with all requirements of this Section 11.1, except that the Owner may in writing excuse a Subcontractor from procuring and maintaining an excess / umbrella policy in conformance with Section 11.1.1.3, where deemed appropriate by the Owner, in its sole discretion.

§ 11.1.2 The Contractor as principal shall furnish to the Owner as obligee bonds covering faithful performance of the Contract and payment of obligations arising from the Contract. The payment and performance bonds shall strictly comply with the Public Construction Bond Act, 30 ILCS 550/0.01, *et seq.* (the "Act"), and with all provisions of this Section 11.1.2 and its subparts to the extent not in conflict with the Act. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located. Each such surety shall have a Best's Key Rating Guide rating of at least A / VIII.

§ 11.1.2.1 The payment and performance bonds shall be executed on AIA Document A311 or A312, or on another form acceptable to the Owner, and shall include a penal sum equivalent to or greater than the Contract Sum as defined in Section 9.1.1. If the Project involves a Contractor who is also serving as a construction manager at risk that will take or has taken assignment of trades pursuant to Section 5.1.1, then for purposes of determining the penal sum of the bond, the Contract Sum means the aggregate sum of all bids awarded by the Owner and assigned to the Contractor as provided in Section 5.1.1.

§ 11.1.2.2 All terms and conditions of all Contract Documents, including those that comprise these A201 General Conditions, as amended, shall be deemed incorporated by reference into each bond furnished in connection with this Section 11.1.2. In case of any conflict between any provision of any performance or payment bond and the Contract Documents, the provisions of the Contract Documents shall prevail to the extent of such conflict. Any provision of any bond purporting to create a condition precedent for Owner not otherwise contained in the Contract Documents, or which otherwise purports to abrogate or nullify the Owner's rights or remedies otherwise available in contract, law, or equity, is void. If any provision of any bond purports to shorten the period of limitations and/or the period of repose as provided in Section 13-214 of the Code of Civil Procedure, 735 ILCS 5/13-214, or if any provision of any bond purports to shorten any other applicable statute of limitation or repose, such provision of such bond shall be null and void, but all other provisions of such bond shall remain enforceable.

§ 11.1.2.3 No surety shall assert solvency of its principal or its principal's denial of default as a defense to any claim under any bond furnished in accordance with this Section 11.1.2.

§ 11.1.2.4 If any surety shall make any assignment for the benefit of creditors or commit any act of bankruptcy, or is declared bankrupt, or if it shall file a voluntary petition in bankruptcy, or shall in the opinion of the Owner be insolvent, the Contractor shall immediately upon request by the Owner furnish and maintain other bonds satisfactory to the Owner. No further payment shall be due nor shall be made to Contractor until the new surety or sureties shall have met the Owner's qualifications.

§ 11.1.2.5 If at any time the Owner shall become reasonably dissatisfied with any surety, or for any other reason such bonds shall cease to be adequate security for the Owner, Contractor shall, within five (5) days after notice to do so, substitute acceptable bonds in such form and sum and signed by such other surety or sureties as may be reasonably satisfactory to the Owner. No further payment shall be deemed due nor shall be made to Contractor until the new surety or sureties shall have met the Owner's qualifications.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished. The Owner may furnish bonds to any person, at any time, without consent of the Contractor.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right but not the obligation to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Builder's Risk Insurance

§ 11.2.1 The Contractor or, if this Project is utilizing a construction manager at-risk and without otherwise limiting the construction manager's obligations as Contractor under this Agreement, the construction manager as Contractor shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk or equivalent policy form for all losses not covered by any professional liability insurance policies to be maintained by the Architect or Construction Manager, if applicable, in accordance with the Contract Documents in the amount of the Contract Sum, as modified by Change Orders, comprising the total value for the entire Project at the site on a replacement cost basis. Insurance obtained by Contractor shall insure against the risks and peril of fire and extended coverage, theft, vandalism, malicious mischief, collapse, flood, earthquake, airborne property, debris removal and other perils or causes of loss, including physical loss or damage to the Work and any materials or equipment in transit, at the Project Site or another location. Such insurance, or other coverage necessary to be obtained by Contractor, shall include mechanical breakdown insurance, including startup and testing in the interest of the Owner or Contractor and its subcontractors. Any required deductible shall be paid by the Contractor unless the Contract Documents otherwise provide or the Owner acknowledges its obligation to pay such deductibles in writing and prior to commencement of the Work. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.2.1 to be covered, whichever is later. This insurance shall include purchased and maintained under this Section 11.2.1 and in accordance with the A201 General Conditions shall include as named insureds the Owner, the Architect, the Contractor, Subcontractors and Sub-subcontractors in the Project.

§ 11.2.2 Reserved.

§ 11.2.3 **Notice of Cancellation or Expiration of Contractor's Required Builder's Risk Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Owner: (1) the Owner, upon receipt of notice from the Contractor, shall have the right but not the obligation to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or

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the Contractor; (2) the Contract Time and Contract Sum shall not be adjusted; and (3) the Contractor waives all rights against the Owner, Subcontractors, and Sub-subcontractors to the extent any loss to the Contractor would have been covered by the insurance had it not expired or been cancelled. If the Owner purchases replacement coverage, the cost of the insurance shall be backcharged to the Contractor by an appropriate Change Order. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide required insurance.

§ 11.3 Reservation of Subrogation

§ 11.3.1 The parties' respective rights of subrogation are reserved.

§ 11.3.2 Reserved.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Contractor as fiduciary and made payable to the Contractor as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Contractor shall pay the Architect and Owner their just shares of insurance proceeds received by the Contractor, and by appropriate agreements the Architect shall make payments to its consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Contractor shall notify the Owner of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Owner shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Owner does not object, the Contractor shall settle the loss and the Owner shall be bound by the settlement and allocation. Upon receipt, the Contractor shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Owner timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Contractor may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Owner's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Owner or Architect, be uncovered for the Owner's or Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Owner or Architect has not specifically requested to examine prior to its being covered, the Owner or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor an express written acceptance of such specific condition. The Owner shall give such notice promptly after discovery of the condition. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it and backcharge the Contractor in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall be extended on specific items of Work identified by the Owner as defective, and such extension shall commence upon the performance of corrective Work by the Contractor pursuant to this Section 12.2. Such extension shall expire one year from the date of completion of such corrective Work.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to any obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the Owner may seek to enforce that obligation or any other obligation arising under the Contract Documents.

§ 12.2.6 All other warranties and guarantees required by the Contract Documents shall be provided to the Architect prior to Substantial Completion or Final Completion, as applicable, and are separate obligations from the obligations contained in this Section 12.2.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so by express written notice to the Contractor instead of requiring its removal and correction, in which case the Contract Sum will be reduced by deductive Change Order, as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the State of Illinois without regard for conflict of law principles.

§ 13.1.1 Contractor and each Subcontractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/2-101 *et seq.*, and Contractor and each Subcontractor hereby certifies that he / she / it has and will maintain at all times during the term of this agreement a written sexual harassment policy in accordance with 775 ILCS 5/2-105(A)(4).

§ 13.1.2 Contractor and each Subcontractor hereby certifies pursuant to Section 33E-11 of the Illinois Criminal Code that he / she / it is not barred from bidding on, or contracting in connection with, the Project as a result of a conviction for either bid-rigging or bid rotating under Section 33E-3 or 33E-4 of the Criminal Code.

§ 13.1.3 The Contractor and each Subcontractor hereby certifies that he / she / it will provide a drug free workplace in compliance Section 3 of the Drug Free Workplace Act, 30 ILCS 580/3.

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§ 13.1.3.1 The Contractor and each Subcontractor shall submit to the Owner certified payrolls in accordance with Section 5 of the Illinois Prevailing Wage Act, 820 ILCS 130/5. The Contractor shall comply with the requirements of the Illinois Prevailing Wage Act (820 ILCS 130/0.01 et seq.) and the Owner's Ordinances, if applicable, requiring payment of prevailing wages. The Contractor shall pay or cause to be paid not less than the prevailing rate of hourly wage in the county the work is performed as determined by the Illinois Department of Labor for the month in which the work is performed including but not limited to all laborers, workers and mechanics. All contractors and subcontractors rendering services under this contract must comply with all requirements under the Act, including but not limited to, all wage, notice and record keeping duties.

The Contractor is required to verify current prevailing wage prior to the first day of each month and to pay the then-current prevailing wage rate as determined by the Illinois Department of Labor. Any increases in costs to the Contractor due to the changes in the prevailing wage during the term of this Contract shall be at the expense of Contractor and not at the expense of Owner. Current prevailing wage rates are published at the following website: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/pages/2018-rates.aspx>. The Contractor agrees to indemnify and hold harmless the Owner for any violations of the Prevailing Wage Act. The Contractor shall also: (1) insert into each subcontract and the project specifications for each subcontract, a written stipulation that the subcontractor shall not pay less than the prevailing rate of hourly wage to all laborers, workers, and mechanics performing work under the contract; and (2) require each subcontractor to insert into each lower-tiered contract and the project specifications for each lower-tiered subcontract, a stipulation that the subcontractor shall not pay less than prevailing rate of hourly wage to all laborers, workers, and mechanics performing work under the contract.

The Contractor shall include on all bonds and shall cause all subcontractors' bonds required under the Contract Documents to guarantee compliance with the Prevailing Wage Act.

Additionally, the Contractor and each subcontractor shall make and keep, for a period of not less than five (5) years from the date of the last payment on a contract or subcontract, records of all laborers, mechanics, and other workers employed by them on the Project; the records shall include each worker's name, address, telephone number when available, social security number, classification or classifications, the hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending times of work each day. The Contractor shall submit monthly, no later than the 10th day of each calendar month, certified payroll to the Illinois Department of Labor's Certified Transcript of Payroll Portal, which can be accessed at: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx>. The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor which states that: (i) he or she has examined the certified payroll and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by this Act; and (iii) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class A misdemeanor. The Contractor may rely on the certification of a lower tier subcontractor, provided the Contractor does not knowingly rely upon a subcontractor's false certification. The records submitted in accordance with this payroll submittal provision shall be considered public records pursuant to Section 5 of the Prevailing Wage Act, 820 ILCS 130/5 (2004, as amended by P.A. 94-515). The Owner may, at its option, immediately terminate the Contract in the event that Contractor violates any provision of this paragraph or the Prevailing Wage Act.

Contractor shall also post the prevailing wage rates for each craft or type of worker or mechanic needed to complete the project at either: (1) a location on the project site easily accessible to the workers engaged on the project; or (2) in lieu of posting on the project site, if the Contractor has a business location where laborers, workers, and mechanics may regularly visit, the Contractor may either post the prevailing rate of wages in each county the Contractor works in a conspicuous location or provide the laborers, workers or mechanics engaged on the project a written notice indicating the prevailing rate of wages for the project.

Upon seven business days' notice, the Contractor and each subcontractor shall make available for inspection and copying at a location within this State during reasonable hours, the records identified in 820 ILCS 130/5(a)(1) to the Owner, and its officers and agents.

§ 13.1.4 Upon the Owner's request, any employee of the Contractor and any employee of any Subcontractor or other supplier or vendor shall submit state-issued identification documents (e.g., driver's license, state identification card, etc.) or other documents to the Owner and provide the necessary consents so that the Owner may obtain a criminal background check of the employee. No person who fails or refuses to produce such documents may work on the Project at the Project site. Alternatively, the Owner reserves the right to direct the Contractor, at any time during the Project, to immediately obtain criminal background checks of Contractor's or Subcontractor's employees. Such criminal background checks will be performed at Contractor's or Subcontractor's expense and at no additional cost to Owner. If in the Owner's sole discretion objectionable information regarding any employee is discovered in the background check, whether performed by Owner or Contractor, such person shall not be allowed to work on the Project at the Project site. The Owner may request new background checks of any employee at any time.

§ 13.1.5 This Contract is subject to and shall be construed in accordance with all provisions of law applicable to the Work and the Project. All applicable rules of law shall prevail over any conflicting provision contained in any of the Contract Documents.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Contractor shall not assign the Contract in whole or in part without written consent of the Owner.

§ 13.2.2 The Contract Documents and these A201 General Conditions provide the rights and obligations by and between Owner, Architect, and Contractor. There are no other beneficiaries to the Contract.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear, without markup by the Architect or Contractor, costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense and without markup by the Architect or Contractor.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest only in accordance with the Local Government Prompt Payment Act, 50 ILCS 505/1, *et seq.*

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Project Work Order if the Work is stopped for a period of 90 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 Reserved.

§ 14.1.2 The Contractor may terminate the Project Work Order if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the Project Work Order and recover from the Owner payment for Work executed. However, in no event shall Contractor be entitled to overhead and profit on Work not executed, or costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Project Work Order and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Project Work Order if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the Contract Documents and/or the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of a material breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

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- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Project Work Order for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work under a Project Work Order, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, including reasonable attorneys' fees, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner upon demand.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be equitably adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.3.2 Any adjustment made to the Contract Sum pursuant to Section 14.3.2 shall be subject to the provisions of Section 7.3.4.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Project Work Order for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders; and
- .4 Immediately assign to the Owner any sub-contractual assignments requested by the Owner pursuant to Section 5.4.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed. However, in no event shall Contractor be entitled to overhead and profit on Work not executed, or costs incurred by reason of such termination.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents. This Section 15.1.1 does not create any conditions precedent on any cause of action the Owner may have against the Contractor.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with applicable law.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by the Contractor under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 If the Owner and Contractor agree with the Initial Decision Maker's decision, the Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision. In the event of such agreement, the Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim, and timely notice is a condition precedent to any recovery or relief by Contractor on such Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given, and such notice is a condition precedent to any recovery or relief by Contractor on such Claim. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

(Paragraphs deleted)

§ 15.1.7 Reserved.

§ 15.2 Initial Decision

§ 15.2.0 As used in this Section 15.2 and its subparts, "Claims" refers only to Claims by the Contractor, and does not include Claims by the Owner.

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to arbitration or litigation, as the case may be, of any Claim initiated by Contractor and arising prior to the date final payment is due. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the Contractor may commence litigation without a

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decision having been rendered, and such litigation shall be subject to the Owner's right to elect arbitration as provided in Section 15.4.1. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall not be binding.

§ 15.2.6 Reserved.

(Paragraph deleted)

§ 15.2.7 Reserved.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Reserved.

(Paragraphs deleted)

§ 15.4 Arbitration

§ 15.4.1 In the sole and exclusive discretion of the Owner, all claims, disputes and other matters in question between any of the Architect, Owner, Contractor, Surety, Subcontractor or any material supplier arising out of, or relating to, agreements to which two or more of said parties are bound, or the Contract Documents or the breach thereof, shall, in the case of such election by the Owner, be decided by arbitration. If the Owner elects such arbitration, it shall be conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect at the time that the demand is made, as modified herein. In any such arbitration, the arbitrator shall make separate findings as to liability and the amount of damages with respect to each party to the arbitration to the extent any liability or responsibility for damages exists. The Architect, surety, subcontractors and material suppliers who have an interest in the dispute shall be joined as parties to the arbitration. The arbitrator shall have authority to decide all issues between the parties. The foregoing option of the Owner to arbitrate and any other agreement to arbitrate with an additional person or persons, duly consented to by the parties, shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.1.1 If the Owner elects arbitration, in its sole discretion, notice of the demand for arbitration shall be filed in writing with the other part(ies) to the arbitration and with the American Arbitration Association. Such demand for arbitration shall be made within a reasonable time after the claim, dispute or other matter in question has arisen, and in

no event shall it be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would otherwise be barred by an applicable statute of limitations or repose. Whether such limitations have been met shall be decided by the arbitrator if contested by a party.

§ 15.4.1.2 All parties shall carry on the Work and perform their duties during any arbitration proceedings, and the Owner shall continue to make payments to the extent required by the Contract Documents. However, at the request of any party, contested payments may be placed in an escrow account pending resolution of the dispute.

§ 15.4.1.3 If the Owner elects arbitration, in its sole discretion, in addition to the other rules of the American Arbitration Association applicable to any arbitration hereunder, the following shall apply:

.1 Promptly after the impaneling of the arbitrator, the arbitrator shall establish a procedure for each party to set forth in writing and to serve upon each other party a detailed statement of its contentions of fact and law, along with appropriate responses thereto;

.2 All parties to the arbitration shall be entitled to reasonable discovery procedures as provided by the Illinois Code of Civil Procedure and Illinois Supreme Court Rules, as supplemented by rules to be established by the arbitrator;

.3 The arbitration shall be commenced and conducted as expeditiously as possible consistent with affording reasonable discovery as provided herein. Similarly, the scope of discovery, and the extent of proceedings hereunder relating to discovery, shall be consistent with the parties' intent that the arbitration be conducted as expeditiously as possible.

§ 15.4.2 In the event of any litigation or arbitration between the parties hereunder, the Contractor shall pay the Owner's reasonable attorneys' fees and court costs to the extent the court or tribunal determines the Owner is the prevailing party.

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(Paragraphs deleted)

Additions and Deletions Report for

AIA® Document A201® – 2017

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VILLAGE OF ADDISON GENERAL CONDITIONS FOR ALL PROJECTS

...

Village of Addison
1 Friendship Plaza
Addison, IL 60101

...

(Name, legal status and address)

As identified in the A101 Agreement between Owner and Contractor

* For purposes of this Agreement, the term "Architect" is synonymous with and used interchangeably with the term "Engineer" elsewhere in the Contract Documents, and this Agreement is intended apply to all engineering and design services provided in connection with each Project

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The Contract Documents are enumerated in the Master Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Project Work Order Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements. The Project Work Order shall take precedence over terms and conditions in the Master Agreement.

...

The term "Work" means all of the Contractor's duties under the Contract Documents and any Project Work Order, including the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project under a Project Work Order.

...

The Project is the total construction of which the Work performed under the Contract Documents-applicable Project Work Order may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

...

~~The Initial Decision Maker~~ Under the Project Work Order, the Initial Decision Maker, if any, is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

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§ 1.2.4 If any two or more provisions of the Contract Documents conflict, and such conflict relates to the quantity or quality of the Work, the Contractor agrees to provide the greater quantity and/or better quality of such Work.

...

~~§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.~~ reserved rights claimed by the owner(s) and any licensee(s) who have an interest in and to the Instruments of Service.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants. owner(s) and any licensee(s) who have an interest in and to the Instruments of Service.

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§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement. transmission.

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~~The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The If the parties agree to protocols governing the transmission and use of Instruments of Service and other documents in digital form, the parties will use AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, to establish the or another form based on written agreement of the parties to establish these protocols for the development, use, transmission, and exchange of digital data.~~

§ 1.8 Building Information Models Use and Reliance

~~Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having these protocols set forth in AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™-2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.~~

§ 1.8 Reserved.

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§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who ~~shall~~ shall, to the extent allowed by law and by the Owner's policies and procedures, have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 ~~The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.~~Reserved.

§ 2.2 ~~Evidence of the Owner's Financial Arrangements~~Reserved.

§ 2.2.1 ~~Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.~~Reserved.

§ 2.2.2 ~~Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.~~Reserved.

§ 2.2.3 ~~After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.~~Reserved.

§ 2.2.4 ~~Where the Owner has designated information furnished under this Section 2.2 as "confidential," furnished any information or documents to the Contractor in connection with the Project, the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, insurers, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.~~

...

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. The Contractor shall provide information or other assistance as the Architect or Owner may request in connection with these obligations.

§ 2.3.2 ~~The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture. As appropriate for the Project, the Owner shall retain an architect and/or engineer lawfully licensed to practice architecture and/or engineering, or an entity lawfully practicing architecture and/or engineering, for any such architectural or design services in addition to or in furtherance of the submittals, except to the extent that such~~

submittals include specialized Work to be performed by Contractor under Section 1.1.3, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 ~~If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect Reserved.~~

§ 2.3.4 ~~The~~ Upon written request by the Contractor, the Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

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If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3. The Owner's rights and remedies under this section are in addition to, and not a limitation of, any other rights and remedies of the Owner under the Contract Documents or otherwise.

...

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or approved construction schedules, and fails within a ~~ten-day~~ five-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. ~~Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for default, neglect, or failure.~~ In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and reasonable attorneys' fees, and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. ~~If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15-Owner within thirty (30) days after a request by the Owner.~~

§ 2.6 Owner's Right to Audit. The Contractor shall keep full and accurate records of all labor and material costs incurred and items billed in connection with the performance of the Work, which records shall be open to inspection, copying, and audit by the Owner or its authorized representatives during performance of the Work and until three years after Final Payment.

...

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative. The Contractor is an independent contractor and shall not be deemed an agent of the Owner for any reason.

§ 3.1.2 The Contractor shall perform the Work in strict accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in strict accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

...

§ 3.2.1 ~~Execution of the Contract by the Contractor is a representation that the Contractor has visited the~~ The Contractor represents that it has visited the Project site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of correlated personal observations with requirements of the Contract Documents, including the Project Work Order, and has satisfied itself as to the nature and location of the Work, the general and local conditions, including those bearing upon access (including partial or total restrictions on access), transportation, delivery, disposal, staging, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, ground water table or similar physical conditions of the ground, the character, quality and quantity of existing conditions to be encountered, the character of equipment and facilities needed prior to and during the prosecution of the Work and all other matters which can in any way effect the Work or the cost thereof under this Agreement. Any failure by the Contractor to acquaint itself with all the available information concerning these conditions will not relieve the Contractor from any obligation under the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor or its Subcontractors or suppliers as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect and Owner any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, ~~subject to Section 15.1.7,~~ Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.2.5 In all cases where Work interconnects with existing facilities, Contractor shall field measure and verify at the site all dimensions relating to such existing facilities. Any conflicts in the Work and the existing facilities which could have been mitigated by the Contractor's obligation to verify the dimensions of the existing facilities shall be promptly rectified by the Contractor at its own expense, and such obligation does not limit the Owner's other rights and remedies under the Contract Documents.

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§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose to Owner and Architect alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. ~~Unless the~~

~~Architect objects to the Contractor's proposed alternative, the Contractor shall perform. The Contractor shall not proceed performing the Work using its alternative means, methods, techniques, sequences, or procedures.~~ procedures without written approval of the Owner through the Architect.

...

§ 3.3.4 The Contractor shall coordinate inspections by governmental authorities having jurisdiction over the Work.

§ 3.3.5 No inspection performed or failed to be performed shall be a waiver of any of the Contractor's obligations hereunder.

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§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the written consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

...

§ 3.4.4 The Contractor shall not at any time permit on the Project site any alcohol or controlled substances whether inside or outside of buildings or structures. Possession or use of any of the foregoing at or adjacent to the site shall obligate the Contractor to remove such offending personnel from the site and replace them at no additional cost to the Owner.

§3.4.5 The Contractor and any Subcontractors shall conform to labor laws of the State and various acts amendatory and supplementary thereto and to other laws, ordinances and legal requirements applicable thereto. Contractor shall enforce among all personnel directly or indirectly employed by it, and among all Subcontractors and their employees, all rules which the Owner may establish for conduct of such personnel on the site.

§3.4.6 The Contractor shall pay prevailing wages in accordance with and shall fully comply with all requirements of the Prevailing Wage Act, 820 ILCS 130/0.01, et seq., including those set forth in Section 13.1.3.1 herein. This Agreement calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/0.01 et seq. ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates, and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All Contractors, Subcontractors, and sub-subcontractors rendering services under this Agreement must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

§ 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will shall strictly conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit, shall be free from defects. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

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The Owner is tax-exempt. Notwithstanding, the Contractor shall pay any applicable sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, received, whether or not yet effective or merely scheduled to go into effect.

...

§ 3.7.2 ~~The~~ Without assuming any design responsibilities, the Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, building codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work ~~knowing it to be contrary~~ to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

...

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or those that should have been reasonably discovered by Architect in accordance with the Standard of Care to be exercised by the Architect prior to commencement of the Work or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or ~~both. If the Architect both, to be approved by Owner. If the either Architect or Owner~~ determines that the conditions at the site are not materially different from those indicated in the Contract Documents or Submittals, and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall immediately notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

...

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection. Notwithstanding any provision of the Contract Documents to the contrary, any use of an allowance account is subject to the written pre-approval of the Owner.

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§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the ~~Work. Work on site.~~ The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The superintendent shall be subject to approval by the Owner and shall not be replaced without the prior written consent of the Owner. The Owner shall have the right to require that the Contractor replace the superintendent, at no additional cost to the Owner, at any time during the duration of the Work if his/her performance is not satisfactory to the Owner.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Owner or Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Owner and Architect to provide

notice within the 14-day period shall constitute notice of no ~~reasonable objection~~ initial objection but shall not affect Owner's right to make a subsequent rejection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner ~~or Architect~~ has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's ~~consent, which shall not unreasonably be withheld or delayed~~ consent.

...

§ 3.10.1.1 The Contractor's construction schedules shall be in a bar chart format, and shall depict, at a minimum, activity identification and durations, critical path, float, early start, early finish, late start, and late finish.

§ 3.10.1.2 The float in the construction schedules will not be deemed exclusively available to the Contractor or Owner, but rather shall be available to either party as needed.

§ 3.10.1.3 No less than once per month, the Contractor shall submit an updated construction schedule. The updated construction schedule shall depict actual start and completion dates for Work commenced and, if appropriate, Work completed. Additionally, the updated construction schedules shall depict updated estimates of anticipated commencement and completion dates for all upcoming Work.

§ 3.10.1.4 The Contractor's submission of the initial construction schedule and monthly schedule updates shall be conditions precedent to certification of the Contractor's application for payment.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect. If the Contractor fails to adhere to the approved construction schedule(s), Contractor shall immediately, at its own expense, take necessary measures to remedy such failure, including addition of personnel and/or equipment, overtime, and/or additional shifts. The Owner shall be entitled to rely on Contractor's schedules for coordination of its own activities, as well as the activities of other contractors working at the Project site or on the Project.

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The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These submittals (collectively the "As-Built Documents"). These As-Built Documents shall be in electronic form or paper copy, available to the Architect and Owner, for review by the Architect or Owner upon reasonable notice, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed. Adequate maintenance of the As-Built Documents shall be a condition precedent to certification of the Contractor's applications for payment.

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§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the ~~Owner and the Architect~~ will specify all performance and design criteria that such services must satisfy. ~~The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents.~~ The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the ~~Owner and Architect~~ have Architect has specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

...

The Contractor shall confine operations at the site to the site access plan, if any, and to the areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

...

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. Throughout the progress of the Work the Contractor shall continually remove from the Project Site and from any adjacent property, all waste, scraps, tools, equipment, storage facilities, machinery, trailers, and vehicles no longer required for prosecution of the Work, such that the Project site remains clean, orderly, and safe.

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The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the ~~Owner or Architect~~. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, or the Contractor has reason to believe that the required design, process, or product is an infringement, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

...

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, ~~fees and litigation expenses (including expert witness fees),~~ arising out of or resulting from performance of the Work, ~~provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by Contractor's breach of contract or by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder.~~ Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18. The obligations of the Contractor under this Section 3.18 shall not extend to the liability of the Architect, the Architect's consultants, and agents and employees of any of them arising out of (1) the preparation or approval of Drawings, opinions, Change Orders, Specifications, or Property Surveys, or (2) the giving of or the failure to give directions or instructions in accordance with the Standard of Care to be exercised by the Architect, the Architect's consultants, and agents and employees of any of them with respect to design.

...

§ 3.18.3 "Claims, damages, losses and expenses" as these words are used herein shall be construed to include, but not be limited to (1) injury or damage resulting from the failure of or use or misuse by Contractor, its Subcontractors, agents, servants or employees, of any hoist, rigging, blocking, scaffolding, or any and all other kinds of items of equipment, whether or not the same be owned, furnished or loaned by Owner; (2) all attorneys' fees and costs incurred in defense of the claim or in bringing an action to enforce the provision of this Indemnity or any other indemnity contained in the Contract Documents, including the fees charged by the indemnitee's expert witnesses; and (3) all costs, expenses, lost time, opportunity costs and other similar indirect or incident damages incurred by the party being indemnified or its employees, agents or consultants.

§ 3.18.4 In the event that the Contractor or its Subcontractors are requested to, but refuse to, honor the indemnity obligations hereunder or to provide a defense, then in addition to all other obligations hereunder, the Contractor and its Subcontractors shall reimburse the Owner and Architect the cost of any legal action concerning Contractor's or

Subcontractor's duty to defend and indemnify under this Agreement, including attorneys' fees, time expended, costs and expenses.

§ 3.18.5 The Contractor hereby knowingly and intentionally waives the right to assert, under the case of *Kotecki v. Cyclops Welding Corp.*, 146 Ill.2d 155 (1991), that Contractor's liability may be limited to the amount of its statutory liability under the Workers' Compensation Act, and agrees that Contractor's liability to indemnify and defend the Owner and Architect is not limited by the so called "Kotecki Cap". The Contractor shall include this provision in each of its Subcontract agreements and shall require its Subcontractors to be so bound.

§ 3.18.6 The Contractor shall include in each and every Subcontract with any and all Subcontractors and/or material suppliers performing Work and require each and every Subcontractor and/or material supplier performing Work to agree to be bound by all of the provisions 3.18.1 through 3.18.10 under the Contract Documents.

§ 3.18.7 The Contractor's indemnity obligations hereunder shall specifically include all claims and judgments which may be made against the indemnitees under federal or state law or the law of the other governmental bodies having jurisdiction, and further, against claims and judgments arising from violation of public ordinances and requirements of governing authorities due to Contractor's or Contractor's employees' method of execution of the Work.

§ 3.18.8 The provisions of this Section 3.18 are not intended to conflict in any way with the Construction Contract Indemnification for Negligence Act, 740 ILCS 35/0.01 et seq. and shall be interpreted in accordance therewith.

§ 3.18.9 The Contractor shall indemnify and hold harmless the Owner in the event of labor or trade union conflicts or disputes between the Contractor and Subcontractors and their respective employees. The Contractor shall endeavor to adjust and resolve such conflicts and disputes which affect the timely completion of the Work. Such conflicts or disputes shall not be a basis or excuse for the breach of the Contract Documents by the Contractor or its Subcontractors, and shall not provide the Contractor with relief from complying with dates for Substantial Completion or Final Completion. Labor or trade union disputes that affect production or delivery of materials or equipment, or the installation, shall be at no cost to the Owner. The Contractor shall notify the Architect and the Owner in writing as soon as possible as to any labor or trade disputes which may affect the Work and its timely completion. In such event, the Contractor shall provide a written proposal to the Architect and the Owner which includes any comparable substitution(s) necessary to complete the Work.

§ 3.18.10 None of the foregoing provisions shall deprive the Owner or the Architect of any action, right or remedy otherwise available to them or either of them at law.

§ 3.19 If the Work is to be performed by trade unions, the Contractor shall make all necessary arrangements to reconcile, without delay, damage, or cost to the Architect or the Owner, any conflict between the Contract Documents and any agreements or regulations of any kind at any time in force among members or councils which regulate or distinguish what activities shall not be included in the Work of any particular trade. Such arrangements are subject to written pre-approval of Owner and Architect. In case the progress of the Work is affected by any undue delay in furnishing or installing any items or materials or equipment required under the Contract Documents because of the conflict involving any such agreement or regulation, the Architect may require that other material or equipment of equal kind and quality be provided at no additional cost to the Owner.

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§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement, Agreement or the Contract Documents.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld unless done so in the manner prescribed by the Owner and Architect's agreement.

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The Owner and Contractor shall endeavor to include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of

any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

...

§ 4.2.6 The Architect ~~has and the Owner each have~~ authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority ~~of the Architect~~ nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner or Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with ~~information given and the design concept expressed in of the information given with the~~ Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

...

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The authority of the Architect's Project representative is limited by the Owner's policies and procedures, and by the terms and conditions of the agreement between the Owner and Architect. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

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§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the ~~Contract Documents.~~ Documents and if approved in writing by the Owner.

...

§ 5.1.1 ~~A-If this Project is utilizing a construction manager at-risk, then when the lowest, responsive and responsible multiple prime trade bidder(s) are identified and awarded contracts by the Owner, each such award shall constitute the automatic assignment of that trade contract by the Owner to the construction manager, who is also known as the "Contractor". Each such successful bidder shall then be known as a "Subcontractor." If this Project is utilizing a single general contractor or multiple prime trade contractors, and the Project is not utilizing a construction manager-at risk, then there shall be no such assignment. In any case, a Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.~~

...

§ 5.2 ~~Award of Subcontracts and Other Contracts for Portions of the Work~~ Reserved.

~~§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14 day period shall constitute notice of no reasonable objection.~~

~~§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.~~

~~§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.~~

~~§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.~~

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect.

Each Subcontractor acknowledges: (1) that the Owner is a direct intended third party beneficiary of each Subcontract between the Contractor and Subcontractor; (2) that notwithstanding any contract provision to the contrary, Subcontractor shall be bound to perform the Work in accordance with these AIA A201 General Conditions, as amended; and (3) that the Subcontractor is not a third-party beneficiary of any contract between Contractor and Owner.

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- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 Work under the applicable Project Work Order by the Owner, and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and

...

~~§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension. Reserved.~~

~~§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract entity, and upon such further assignment, the Owner shall have no further liability to such subcontractor.~~

...

~~§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project or other construction or operations on the site with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation. Contractors. If the Contractor claims that delay or~~

additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

...

~~§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.~~

...

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. ~~The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.~~

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. ~~The Subject to Article 15,~~ the Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

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~~§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14. Reserved.~~

...

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and ~~the Architect will~~ allocate the cost among those responsible.

...

§ 7.1.1 ~~The Owner may, without invalidating the Contract and without notice to the surety, direct changes in the Work.~~ Changes in the Work may be accomplished after execution of the Contract, applicable Project Work Order, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

...

§ 7.1.4 No Change Order shall be approved or paid unless preceded by a written direction for the Change Order is provided by the Owner. This requirement cannot be waived by conduct, custom, or practice with respect to this Project or other projects. There shall be no implied or constructive change orders.

...

§ 7.2.2 No payment for changes in the Work shall be made until such change has been memorialized in an executed Change Order and the Change has been executed.

§ 7.2.3 If the Contractor is also the Project's Construction Manager pursuant to a separate construction management agreement with the Owner, the Contractor shall not be permitted any markup on Change Orders or compensation with respect to Change Orders, other than as may be provided in such construction management agreement. The Subcontractors, and any Contractor who is not serving as Construction Manager for the Project, shall be entitled to the following markups for additive Changes Orders, and shall be required to take the following mark-downs for deductive Change Orders. Additional markup for insurance or bonds will not be allowed. All Change Order requests must be submitted with the following backup information or they will not be reviewed or processed by the Architect or Owner: material and labor quantities, material unit costs, labor rates, and any other substantiating data to explain and substantiate the Change Order amount.

Markups and Markdowns for Change Orders:

Additive Change Order: 10%

Deductive Change Order: 10%

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§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order-Order for the purposes of defining the change and/or how any payment shall be calculated, but not for the purpose of approving payment.

...

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;evaluation, with markups for overhead and profit as permitted by the Contract Documents;

...

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount-Section 7.2.3, except for emergencies as provided in Section 10.4, in which case Contractor shall not be entitled to overhead and profit. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;the Architect these costs, shall be computed at the Comprehensive Trade Rates attached as an exhibit to the Project Work Order;

...

- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;others, as set forth in Contractor's Equipment Rental Rates and Practices, attached as an exhibit to the Project Work Order;

...

- .5 Costs of supervision and field office personnel directly attributable to the change-the change, computed at the Comprehensive Management Rates attached as an exhibit to the Project Order.

...

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such Upon execution by the Owner, such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net ~~increase, increase or net decrease~~, if any, with respect to that change.

§ 7.3.9 ~~Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15-Reserved.~~

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§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, Project Work Order, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and ~~Owner~~. Owner for the Work under the Project Work Order.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the ~~Contract Time~~. Time under the Project Work Order. The Contractor shall achieve Final Completion within thirty (30) days following Substantial Completion.

...

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by ~~(1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, a cause that (1) was reasonably unforeseeable to the Contractor; and (2) is not within the Contractor's control,~~ then the Contract Time shall be extended for such reasonable time as the Architect may determine equitably extended and such extension shall be reduced to a Change Order.

...

§ 8.3.3 ~~This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.~~ Extension of Contract Time under the Project Work Order pursuant to this Article 8 shall be the Contractor's sole and exclusive remedy for delay.

§ 8.3.4 Extension of Contract Time under the Project Work Order resulting from Changes in the Work shall be negotiated into respective Change Orders. Whenever the Contractor seeks an adjustment in the Contract Time as part of a Claim or Change Order, the Contractor shall justify the request with proper written reference to the approved construction schedules. All executed Change Orders shall be deemed to include adjustments in the Contract Time, if any, resulting from the underlying Change in the Work.

§ 8.3.5 In addition to other rights and remedies set forth elsewhere in the Contract Documents, the Contractor shall reimburse the Owner for all Architect's fees and expenses for additional services necessitated by (1) Contractor's failure to achieve Substantial Completion within the time established in the Contract Documents; (2) for more than one inspection to determine Substantial Completion; and (3) for more than one inspection to determine Final Completion.

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents. If the Contractor is also the construction manager pursuant to a construction management agreement with the Owner, that agreement contains any and all additional compensation payable to the Contractor in its role as construction manager.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated ~~are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, for any one item of material or equipment are changed by more than 25% in a proposed Change Order or Construction Change Directive,~~ the applicable unit prices shall be equitably ~~adjusted.~~ adjusted in such Change Order or Construction Change Directive.

...

~~Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the~~ The Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. Subcontracts. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect, requested by the Architect. Each section of the schedule organized by Subcontract shall further allocate each Subcontractor's Work into discrete tasks with values corresponding to each task. The total of all values for all tasks for all Subcontractors shall equal the Contract Sum. Portions of the Work not subcontracted shall be allocated into discrete tasks and corresponding values. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment. Approval by the Owner of the schedule of values (and revisions thereto) shall be a condition precedent to certification of Contractor's applications for payment.

...

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, ~~if values required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as including copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents. The Contractor's inclusion in an Application for Payment of an amount owed to a Subcontractor shall constitute the Contractor's certification to the Owner that such Subcontractor is entitled to payment in that amount, and that there are no backcharges, Claims, or other disputes then pending or anticipated which may impact that Subcontractor's right to such payment. Contractor shall submit all Applications for Payment in a consistent format.~~

§ 9.3.1.1 ~~As provided in Section 7.3.9, such~~ Such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor ~~does not intend to pay~~ has not approved payment to a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay and the Contractor has approved said payment.

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§ 9.3.4 All Applications for Payment shall be accompanied by lien waivers from the Contractor and applicable Subcontractors. The lien waivers, when taken together, shall equal the sum due and paid under the immediately preceding Application for Payment, and shall be effective through the submittal date of the immediately preceding Application.

§ 9.3.5 All Applications for Payment shall be accompanied by the Contractor's and Subcontractors' certified payrolls as required by the Illinois Prevailing Wage Act, 820 ILCS 130/5.

§ 9.3.6 Submission of properly executed lien waivers and the certified payrolls are conditions precedent to certification of each Application for Payment.

...

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be ~~made~~. ~~Made~~, or if any other condition precedent to payment has not occurred. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

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.7 ~~repeated~~-failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 ~~When either party~~ If Contractor disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, ~~that party~~ Contractor may submit a Claim in accordance with Article 15.

...

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in ~~the manner and within the time~~ accordance with the Local Government Prompt Payment Act, 50 ILCS 505/1, et seq. and as may be otherwise provided in the Contract Documents, and shall so notify the Architect.

...

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law. In the sole discretion of the Owner, if the Contractor fails to furnish evidence as required by this Section, the Owner has the right, but not the obligation, to pay Subcontractors and suppliers directly.

...

§ 9.6.7 ~~Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments~~ Payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. ~~Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.~~

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted at any time there is evidence of any liens or claims for which the Owner may become liable. the Owner shall have the right to retain, out of any payment due or thereafter to

become due to Contractor or a Subcontractor, an amount sufficient to completely indemnify and defend the Owner from and against such lien or claim, including any reasonable attorneys' fees and litigation expenses that have been or may be incurred by the Owner. Should any such evidence be established after all payments are made, the Contractor or Subcontractor shall repay the Owner all sums which the Owner may be compelled to pay in discharging such lien or claim, including all reasonable attorneys' fees, litigation expenses, and other costs resulting from such lien or claim.

§9.6.9 The Owner shall withhold ten percent (10%) from all progress payments to the Contractor as retention. The Contractor shall request retention with its final Application for Payment as provided in Section 9.10. No interest shall accrue on monies held in retention. Contractor shall ensure that each contract between Contractor and each Subcontractor contains this same provision for the withholding and release of retention.

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§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use without any interference resulting from Contractor's operations or from incomplete work. The Work is not substantially complete until all Project systems included in the Work are operational as designed and scheduled, all required governmental inspections and certifications have been made and obtained, designated instruction of the Owner's personnel in the operation of systems has been completed and documented, and all final finishes required by the Contract Documents have been installed. The Work is not substantially complete until the Contractor has submitted the following items to the Owner or Architect:

1. All As-Built Documents in conformance with the Contract Documents and the requirements of this Agreement;
2. All operations and maintenance manuals as required by the Contract Documents;
3. All manufacturers' warranties as required by the Contract Documents; if such warranties cannot be executed until the Certificate of Substantial Completion is executed, the Contractor shall submit a warranty specimen as a condition of Substantial Completion, and shall submit the fully executed warranty prior to Final Completion.

If in the event Contractor does not complete remaining work within thirty (30) days of Substantial completion, Owner shall give the Contractor written notice of the remaining Work to be completed. If the Contractor fails to complete the remaining work to be completed within five (5) days of receipt of the written notice, the Owner reserves the right to complete the remaining Work in accordance with § 2.4 without further notice to the Contractor. All costs incurred by Owner therein shall be offset against Contractor's final payment.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Payment, which shall be attached to the Certificate of Substantial Completion (the "Punch List"). Failure to include an item on such list the Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, Punch List, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, Punch List, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that with the Punch List attached. The Certificate of Substantial Completion shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list Punch List accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

~~§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.~~

§ 9.8.6 Upon Substantial Completion, the Contractor and Subcontractors hereby assign all vendor and manufacturers' warranties to the Owner, if and to the extent any such warranty identified the Contractor or a Subcontractor, and not the Owner, as the entity to whom the warrantor is obligated.

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§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list-Punch List to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

...

~~§ 9.9.3 Unless otherwise agreed upon, partial-Partial~~ occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

...

§ 9.10.1 All Work depicted on the Contractor's Punch List and thereafter identified in the Architect's inspection shall be completed by Contractor within thirty (30) days of issuance of the Certificate of Substantial Completion. Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate-Certificate, including retention held pursuant to Section 9.6.9, is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and including those fully-executed warranties required by Section 9.8.1.1 to be furnished prior to final completion, and (6) final releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. Owner, along with the final submittal of certified payroll as provided by Section 5 of the Prevailing Wage Act, 820

ILCS 130/5. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all ~~costs and reasonable attorneys' fees~~, costs, reasonable attorneys' fees, and litigation expenses.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, ~~except that it and~~ shall not constitute a waiver of Claims.

Otherwise, if the Contractor does not complete remaining work within thirty (30) days after Substantial Completion, Owner may complete the remaining Work and backcharge the Contractor in accordance with Section 2.5. All related costs incurred by Owner shall be deducted from Contractor's final payment, and if the amount of Contractor's final Application for Payment is insufficient to cover such costs, Contractor shall pay such insufficiency to Owner upon demand.

§ 9.10.4 ~~The making of final payment shall constitute a waiver of Claims by the Owner except those arising from~~
~~1 — liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;~~
~~2 — failure of the Work to comply with the requirements of the Contract Documents;~~
~~3 — terms of special warranties required by the Contract Documents; or~~
~~4 — audits performed by the Owner, if permitted by the Contract Documents, after final payment.~~ Reserved.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and specifically identified by that payee as unsettled at the time of final Application for Payment.

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The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. Neither the Owner nor the Architect shall be responsible for any safety precautions or programs in connection with the Work.

...

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or ~~loss-loss~~, including any orders and regulations resulting from an act of government declaring a national or state emergency that requires all Work to be stopped or causes delay in such Work.

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~~If either party~~ any person suffers injury or damage to person or property because of an act or omission of ~~the other a~~ party, or of others for whose acts such party is legally responsible, the responsible party shall give notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

...

§ 10.3.1 ~~The~~ Without accepting any responsibility or liability for the remediation of hazardous materials that exist on or contiguous to the Project site as of the date of the Agreement, the Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the

Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall ~~resume upon written agreement of the Owner and Contractor.~~ resume. By Change Order, the Contract Time shall be ~~extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.~~ equitably extended.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity. ~~Reserved.~~

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the ~~use and handling of such materials or substances, procurement, delivery, unloading, loading, stockpiling, storing, preparing, installing, use and/or handling of such materials or substances~~ (collectively, "handling").

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and ~~faultily or negligently handles,~~ or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 ~~If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.~~ Reserved.

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In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. ~~Additional-Except as otherwise provided herein, additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.~~

In the event such an emergency is the result of any orders and regulations resulting from an act of government declaring a national or state emergency that requires all Work to be stopped or causes delay in such Work:

1. Additional extension of time claimed by the Contractor on account of the emergency shall be determined by Article 8 and Article 15.
2. Additional compensation claimed by the Contractor on account of the emergency shall be determined by Article 7.3.4 and Article 15.

3. Contractor shall be required to provide reasonable evidence to Owner demonstrating that such claims are the result of an emergency and Contractor's need to preserve the safety of persons or property in accordance with a national or state emergency declaration. Owner reserves the right to deny any such claim in the event Contractor has not provided sufficient reasonable evidence as determined by Owner in its sole discretion.

...

§ 11.1.1 The Contractor, and the Subcontractors, to the extent applicable as specified below, shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor this Section 11.1 and its subparts and elsewhere in the Contract Documents. To the extent of any conflict between this Section 11.1 and other Contract Documents, the Contractor and Subcontractors shall purchase and maintain the insurance with the higher limits, broader coverage, and better protections for the Owner. The Contractor and Subcontractors shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. Such coverage shall be procured on an occurrence basis. Such coverage shall be procured from insurers with a Best's Key Rating Guide rating of at least A / VIII. The Owner, Architect, and Architect's consultants shall by endorsement be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents and each Subcontractor's commercial general liability policy, automobile liability policy, and excess or umbrella policy, all on a primary and noncontributory basis.

§ 11.1.1.1 Commercial general liability insurance including coverage for contractual liability and completed operations, explosion, collapse and underground hazards, covering personal injury, bodily injury and property damage, in the amount of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate.

§ 11.1.1.2 Automobile liability insurance, including hired, rented, and non-owned vehicles, covering personal injury, bodily injury and property damage, with a combined single limit of One Million Dollars (\$1,000,000).

§ 11.1.1.3 Umbrella / excess insurance coverage with a limit of at least Ten Million Dollars (\$10,000,000).

§ 11.1.1.4 Workers' compensation insurance in the amount of the statutory minimum with an employer's liability coverage of at least One Million Dollars (\$1,000,000).

§ 11.1.1.5 The Contractor, and Subcontractors as applicable, shall maintain the insurance required by this Section 11.1 without interruption from the date of the Agreement until the date of final payment, and, with respect to their completed operations coverage, until three (3) years after Substantial Completion of Work, or for such other period for maintenance of completed operations coverage as specified in the Contract Documents, whichever is greatest.

§ 11.1.1.6 Prior to commencement of the Work, and again prior to the expiration of any policy, the Contractor and all Subcontractors shall furnish to the Owner and Architect certificates of insurance, policy declarations, all policy endorsements, and if requested by the Owner the policies, all reflecting the insurance required by this Section 11.1. An additional certificate and endorsements evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted by Contractor and all Subcontractors with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the time permitted for expiration. If any aggregate limit is reduced on account of claims paid, Contractor and Subcontractor shall immediately notify the Owner and Architect in writing of the amount of such reduction.

§ 11.1.1.7 Failure of either the Architect or Owner to demand certificates of insurance and/or policies and/or endorsements shall not constitute a waiver of the Contractor's and Subcontractor's responsibilities under this Section 11.1. Nor shall review and/or approval by either the Owner or Architect in any way relieve Contractor or any Subcontractor of its responsibility for furnishing sufficient insurance.

§ 11.1.1.8 Liability of Contractor or Subcontractor is not limited by these insurance requirements or by actual insurance coverage. Nothing related to insurance requirements in the Contract Documents is to be construed as limiting the liability of the Contractor, the liability of any Subcontractor of any tier, or the liability of the Architect, or

any of their respective insurance carriers. Owner does not represent that the coverages or limits of insurance specified are sufficient or adequate to protect the Owner, Contractor, Architect, or any Subcontractor's interest or liabilities, but are merely minimums.

§ 11.1.1.9 Each Subcontractor shall comply with all requirements of this Section 11.1, except that the Owner may in writing excuse a Subcontractor from procuring and maintaining an excess / umbrella policy in conformance with Section 11.1.1.3, where deemed appropriate by the Owner, in its sole discretion.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents, as principal shall furnish to the Owner as obligee bonds covering faithful performance of the Contract and payment of obligations arising from the Contract. The payment and performance bonds shall strictly comply with the Public Construction Bond Act, 30 ILCS 550/0.01, et seq. (the "Act"), and with all provisions of this Section 11.1.2 and its subparts to the extent not in conflict with the Act. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located. Each such surety shall have a Best's Key Rating Guide rating of at least A / VIII.

§ 11.1.2.1 The payment and performance bonds shall be executed on AIA Document A311 or A312, or on another form acceptable to the Owner, and shall include a penal sum equivalent to or greater than the Contract Sum as defined in Section 9.1.1. If the Project involves a Contractor who is also serving as a construction manager at risk that will take or has taken assignment of trades pursuant to Section 5.1.1, then for purposes of determining the penal sum of the bond, the Contract Sum means the aggregate sum of all bids awarded by the Owner and assigned to the Contractor as provided in Section 5.1.1.

§ 11.1.2.2 All terms and conditions of all Contract Documents, including those that comprise these A201 General Conditions, as amended, shall be deemed incorporated by reference into each bond furnished in connection with this Section 11.1.2. In case of any conflict between any provision of any performance or payment bond and the Contract Documents, the provisions of the Contract Documents shall prevail to the extent of such conflict. Any provision of any bond purporting to create a condition precedent for Owner not otherwise contained in the Contract Documents, or which otherwise purports to abrogate or nullify the Owner's rights or remedies otherwise available in contract, law, or equity, is void. If any provision of any bond purports to shorten the period of limitations and/or the period of repose as provided in Section 13-214 of the Code of Civil Procedure, 735 ILCS 5/13-214, or if any provision of any bond purports to shorten any other applicable statute of limitation or repose, such provision of such bond shall be null and void, but all other provisions of such bond shall remain enforceable.

§ 11.1.2.3 No surety shall assert solvency of its principal or its principal's denial of default as a defense to any claim under any bond furnished in accordance with this Section 11.1.2.

§ 11.1.2.4 If any surety shall make any assignment for the benefit of creditors or commit any act of bankruptcy, or is declared bankrupt, or if it shall file a voluntary petition in bankruptcy, or shall in the opinion of the Owner be insolvent, the Contractor shall immediately upon request by the Owner furnish and maintain other bonds satisfactory to the Owner. No further payment shall be due nor shall be made to Contractor until the new surety or sureties shall have met the Owner's qualifications.

§ 11.1.2.5 If at any time the Owner shall become reasonably dissatisfied with any surety, or for any other reason such bonds shall cease to be adequate security for the Owner, Contractor shall, within five (5) days after notice to do so, substitute acceptable bonds in such form and sum and signed by such other surety or sureties as may be reasonably satisfactory to the Owner. No further payment shall be deemed due nor shall be made to Contractor until the new surety or sureties shall have met the Owner's qualifications.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished. The Owner may furnish bonds to any person, at any time, without consent of the Contractor.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or

expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right but not the obligation to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2 Builder's Risk Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. Contractor or, if this Project is utilizing a construction manager at-risk and without otherwise limiting the construction manager's obligations as Contractor under this Agreement, the construction manager as Contractor shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk or equivalent policy form for all losses not covered by any professional liability insurance policies to be maintained by the Architect or Construction Manager, if applicable, in accordance with the Contract Documents in the amount of the Contract Sum, as modified by Change Orders, comprising the total value for the entire Project at the site on a replacement cost basis. Insurance obtained by Contractor shall insure against the risks and peril of fire and extended coverage, theft, vandalism, malicious mischief, collapse, flood, earthquake, airborne property, debris removal and other perils or causes of loss, including physical loss or damage to the Work and any materials or equipment in transit, at the Project Site or another location. Such insurance, or other coverage necessary to be obtained by Contractor, shall include mechanical breakdown insurance, including startup and testing in the interest of the Owner or Contractor and its subcontractors. Any required deductible shall be paid by the Contractor unless the Contract Documents otherwise provide or the Owner acknowledges its obligation to pay such deductibles in writing and prior to commencement of the Work. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.2.1 to be covered, whichever is later. This insurance shall include purchased and maintained under this Section 11.2.1 and in accordance with the A201 General Conditions shall include as named insureds the Owner, the Architect, the Contractor, Subcontractors and Sub-subcontractors in the Project.

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§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto. Reserved.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property-Contractor's Required Builder's Risk Insurance. Within three (3) business days of the date the Owner-Contractor becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner-Contractor shall provide notice to the Contractor-Owner of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor-Owner: (1) the Contractor-Owner, upon receipt of notice from the Owner-Contractor, shall have the right but not the obligation to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall not be equitably adjusted; and (3) the Owner-Contractor waives all rights against the Contractor-Owner, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner-Contractor would have been covered by the insurance had it not expired or been cancelled. If the Contractor-Owner purchases replacement coverage, the cost of the insurance shall be charged back to the Owner-Contractor by an appropriate Change

Order. The furnishing of notice by the ~~Owner-Contractor~~ shall not relieve the ~~Owner-Contractor~~ of any contractual obligation to provide required insurance.

§ 11.3 Waivers-Reservation of Subrogation

~~§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise; (2) even though that person or entity did not pay the insurance premium directly or indirectly; or (3) whether or not the person or entity had an insurable interest in the damaged property-parties' respective rights of subrogation are reserved.~~

~~§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.~~Reserved.

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The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. ~~The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.~~

...

~~§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner Contractor as fiduciary and made payable to the Owner-Contractor as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner-Contractor shall pay the Architect and Contractor-Owner their just shares of insurance proceeds received by the Owner-Contractor, and by appropriate agreements the Architect and Contractor shall make payments to their-its consultants and Subcontractors in similar manner.~~

~~§ 11.5.2 Prior to settlement of an insured loss, the Owner-Contractor shall notify the Contractor-Owner of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor-Owner shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor-Owner does not object, the Owner-Contractor shall settle the loss and the Contractor-Owner shall be bound by the settlement and allocation. Upon receipt, the Owner-Contractor shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor-Owner timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner-Contractor may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.~~

...

§ 12.1.1 If a portion of the Work is covered contrary to the Owner's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Owner or Architect, be uncovered for the Owner's or Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Owner or Architect has not specifically requested to examine prior to its being covered, the Owner or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

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§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor ~~a~~ an ~~express~~ written acceptance of such specific condition. The Owner shall give such notice promptly after discovery of the condition. ~~During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty.~~ If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it and backcharge the Contractor in accordance with Section 2.5.

...

§ 12.2.2.3 The one-year period for correction of Work shall ~~not be extended by corrective Work performed by~~ extended on specific items of Work identified by the Owner as defective, and such extension shall commence upon the performance of corrective Work by the Contractor pursuant to this Section 12.2. Such extension shall expire one year from the date of completion of such corrective Work.

...

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to ~~other any~~ obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the ~~obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.~~ Owner may seek to enforce that obligation or any other obligation arising under the Contract Documents.

§ 12.2.6 All other warranties and guarantees required by the Contract Documents shall be provided to the Architect prior to Substantial Completion or Final Completion, as applicable, and are separate obligations from the obligations contained in this Section 12.2.

...

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so by express written notice to the Contractor instead of requiring its removal and correction, in which case the Contract Sum will be reduced by deductive Change Order, as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

...

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4, State of Illinois without regard for conflict of law principles.

§ 13.1.1 Contractor and each Subcontractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/2-101 et seq., and Contractor and each Subcontractor hereby certifies that he / she / it has and will maintain at all times during the term of this agreement a written sexual harassment policy in accordance with 775 ILCS 5/2-105(A)(4).

§ 13.1.2 Contractor and each Subcontractor hereby certifies pursuant to Section 33E-11 of the Illinois Criminal Code that he / she / it is not barred from bidding on, or contracting in connection with, the Project as a result of a conviction for either bid-rigging or bid rotating under Section 33E-3 or 33E-4 of the Criminal Code.

§ 13.1.3 The Contractor and each Subcontractor hereby certifies that he / she / it will provide a drug free workplace in compliance Section 3 of the Drug Free Workplace Act, 30 ILCS 580/3.

§ 13.1.3.1 The Contractor and each Subcontractor shall submit to the Owner certified payrolls in accordance with Section 5 of the Illinois Prevailing Wage Act, 820 ILCS 130/5. The Contractor shall comply with the requirements of the Illinois Prevailing Wage Act (820 ILCS 130/0.01 et seq.) and the Owner's Ordinances, if applicable, requiring payment of prevailing wages. The Contractor shall pay or cause to be paid not less than the prevailing rate of hourly wage in the county the work is performed as determined by the Illinois Department of Labor for the month in which the work is performed including but not limited to all laborers, workers and mechanics. All contractors and subcontractors rendering services under this contract must comply with all requirements under the Act, including but not limited to, all wage, notice and record keeping duties.

The Contractor is required to verify current prevailing wage prior to the first day of each month and to pay the then-current prevailing wage rate as determined by the Illinois Department of Labor. Any increases in costs to the Contractor due to the changes in the prevailing wage during the term of this Contract shall be at the expense of Contractor and not at the expense of Owner. Current prevailing wage rates are published at the following website: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/pages/2018-rates.aspx>. The Contractor agrees to indemnify and hold harmless the Owner for any violations of the Prevailing Wage Act. The Contractor shall also: (1) insert into each subcontract and the project specifications for each subcontract, a written stipulation that the subcontractor shall not pay less than the prevailing rate of hourly wage to all laborers, workers, and mechanics performing work under the contract; and (2) require each subcontractor to insert into each lower-tiered contract and the project specifications for each lower-tiered subcontract, a stipulation that the subcontractor shall not pay less than prevailing rate of hourly wage to all laborers, workers, and mechanics performing work under the contract.

The Contractor shall include on all bonds and shall cause all subcontractors' bonds required under the Contract Documents to guarantee compliance with the Prevailing Wage Act.

Additionally, the Contractor and each subcontractor shall make and keep, for a period of not less than five (5) years from the date of the last payment on a contract or subcontract, records of all laborers, mechanics, and other workers employed by them on the Project; the records shall include each worker's name, address, telephone number when available, social security number, classification or classifications, the hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending times of work each day. The Contractor shall submit monthly, no later than the 10th day of each calendar month, certified payroll to the Illinois Department of Labor's Certified Transcript of Payroll Portal, which can be accessed at: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx>. The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor which states that: (i) he or she has examined the certified payroll and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by this Act; and (iii) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class A misdemeanor. The Contractor may rely on the certification of a lower tier subcontractor, provided the Contractor does not knowingly rely upon a subcontractor's false certification. The records submitted in accordance with this payroll submittal provision shall be considered public records pursuant to Section 5 of the Prevailing Wage Act, 820 ILCS 130/5 (2004, as amended by P.A. 94-515). The Owner may, at its option,

immediately terminate the Contract in the event that Contractor violates any provision of this paragraph or the Prevailing Wage Act.

Contractor shall also post the prevailing wage rates for each craft or type of worker or mechanic needed to complete the project at either: (1) a location on the project site easily accessible to the workers engaged on the project; or (2) in lieu of posting on the project site, if the Contractor has a business location where laborers, workers, and mechanics may regularly visit, the Contractor may either post the prevailing rate of wages in each county the Contractor works in a conspicuous location or provide the laborers, workers or mechanics engaged on the project a written notice indicating the prevailing rate of wages for the project.

Upon seven business days' notice, the Contractor and each subcontractor shall make available for inspection and copying at a location within this State during reasonable hours, the records identified in 820 ILCS 130/5(a)(1) to the Owner, and its officers and agents.

§ 13.1.4 Upon the Owner's request, any employee of the Contractor and any employee of any Subcontractor or other supplier or vendor shall submit state-issued identification documents (e.g., driver's license, state identification card, etc.) or other documents to the Owner and provide the necessary consents so that the Owner may obtain a criminal background check of the employee. No person who fails or refuses to produce such documents may work on the Project at the Project site. Alternatively, the Owner reserves the right to direct the Contractor, at any time during the Project, to immediately obtain criminal background checks of Contractor's or Subcontractor's employees. Such criminal background checks will be performed at Contractor's or Subcontractor's expense and at no additional cost to Owner. If in the Owner's sole discretion objectionable information regarding any employee is discovered in the background check, whether performed by Owner or Contractor, such person shall not be allowed to work on the Project at the Project site. The Owner may request new background checks of any employee at any time.

§ 13.1.5 This Contract is subject to and shall be construed in accordance with all provisions of law applicable to the Work and the Project. All applicable rules of law shall prevail over any conflicting provision contained in any of the Contract Documents.

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§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. ~~Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.~~ Contractor shall not assign the Contract in whole or in part without written consent of the Owner.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment. Contract Documents and these A201 General Conditions provide the rights and obligations by and between Owner, Architect, and Contractor. There are no other beneficiaries to the Contract.

...

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall ~~bear~~ bear, without markup by the Architect or Contractor, costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's ~~expense~~ and without markup by the Architect or Contractor.

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Payments due and unpaid under the Contract Documents shall bear interest ~~from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located~~ only in accordance with the Local Government Prompt Payment Act, 50 ILCS 505/1, *et seq.*

...

§ 14.1.1 The Contractor may terminate the ~~Contract~~ Project Work Order if the Work is stopped for a period of ~~30~~ 90 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

...

.4 ~~The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2. Reserved.~~

§ 14.1.2 The Contractor may terminate the ~~Contract~~ Project Work Order if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the ~~Contract~~ Project Work Order and recover from the Owner payment for Work ~~executed, as well as reasonable~~ executed. However, in no event shall Contractor be entitled to overhead and profit on Work not executed, and/or costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the ~~Contract~~ Project Work Order and recover from the Owner as provided in Section 14.1.3.

...

§ 14.2.1 The Owner may terminate the ~~Contract~~ Project Work Order if the Contractor

- .1 ~~repeatedly~~ refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the Contract Documents and/or the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 ~~repeatedly~~ disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of ~~substantial~~ a material breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, ~~and upon certification by the Architect that sufficient cause exists to justify such action,~~ the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, ~~seven days' written~~ notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

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§ 14.2.3 When the Owner terminates the ~~Contract-Project Work Order~~ for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the ~~Work~~, ~~Work under a Project Work Order~~, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, including reasonable attorneys' fees, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the ~~Owner~~. ~~The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.~~ Owner upon demand.

...

§ 14.3.2 The Contract Sum and Contract Time shall be equitably adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. ~~Adjustment of the Contract Sum shall include profit.~~ No adjustment shall be made to the extent

...

- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.3.2 Any adjustment made to the Contract Sum pursuant to Section 14.3.2 shall be subject to the provisions of Section 7.3.4.

...

§ 14.4.1 The Owner may, at any time, terminate the ~~Contract-Project Work Order~~ for the Owner's convenience and without cause.

...

- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;
and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders; and
- .4 Immediately assign to the Owner any sub-contractual assignments requested by the Owner pursuant to Section 5.4.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly ~~executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.~~ executed. However, in no event shall Contractor be entitled to overhead and profit on Work not executed, or costs incurred by reason of such termination.

...

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents. This Section 15.1.1 does not create any conditions precedent on any cause of action the Owner may have against the Contractor.

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The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with ~~the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law,~~

~~but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2 applicable law.~~

...

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by ~~either party~~ the Contractor under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the ~~claimant~~ Contractor first recognizes the condition giving rise to the Claim, whichever is later.

...

§ 15.1.4.2 ~~The If the Owner and Contractor agree with the Initial Decision Maker's decision, the Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The decision. In the event of such agreement, the Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.~~

...

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim, and timely notice is a condition precedent to any recovery or relief by Contractor on such Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

...

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be ~~given~~ given, and such notice is a condition precedent to any recovery or relief by Contractor on such Claim. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

...

~~§ 15.1.7 Waiver of Claims for Consequential Damages~~

~~The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes~~

- ~~1. damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and~~
- ~~2. damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.~~

~~This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.~~

§ 15.1.7 Reserved.

§ 15.2.0 As used in this Section 15.2 and its subparts, "Claims" refers only to Claims by the Contractor, and does not include Claims by the Owner.

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be

referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to ~~mediation of any Claim, arbitration or litigation, as the case may be, of any Claim initiated by Contractor and arising prior to the date final payment is due.~~ If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the ~~party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Contractor may commence litigation without a decision having been rendered, and such litigation shall be subject to the Owner's right to elect arbitration as provided in Section 15.4.1.~~ Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

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§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall ~~be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution not be binding.~~

§ 15.2.6 ~~Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1. Reserved.~~

~~§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.~~

§ 15.2.7 ~~In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy. Reserved.~~

...

§ 15.3 ~~Mediation Reserved.~~

§ 15.3.1 ~~Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.~~

§ 15.3.2 ~~The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.~~

§ 15.3.3 ~~Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.~~

§ 15.3.4 ~~The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.~~

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded. In the sole and exclusive discretion of the Owner, all claims, disputes and other matters in question between any of the Architect, Owner, Contractor, Surety, Subcontractor or any material supplier arising out of, or relating to, agreements to which two or more of said parties are bound, or the Contract Documents or the breach thereof, shall, in the case of such election by the Owner, be decided by arbitration. If the Owner elects such arbitration, it shall be conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect at the time that the demand is made, as modified herein. In any such arbitration, the arbitrator shall make separate findings as to liability and the amount of damages with respect to each party to the arbitration to the extent any liability or responsibility for damages exists. The Architect, surety, subcontractors and material suppliers who have an interest in the dispute shall be joined as parties to the arbitration. The arbitrator shall have authority to decide all issues between the parties. The foregoing option of the Owner to arbitrate and any other agreement to arbitrate with an additional person or persons, duly consented to by the parties, shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but If the Owner elects arbitration, in its sole discretion, notice of the demand for arbitration shall be filed in writing with the other part(ies) to the arbitration and with the American Arbitration Association. Such demand for arbitration shall be made within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim. Such claim, dispute or other matter in question would otherwise be barred by an applicable statute of limitations or repose. Whether such limitations have been met shall be decided by the arbitrator if contested by a party.

§ 15.4.1.2 All parties shall carry on the Work and perform their duties during any arbitration proceedings, and the Owner shall continue to make payments to the extent required by the Contract Documents. However, at the request of any party, contested payments may be placed in an escrow account pending resolution of the dispute.

§ 15.4.1.3 If the Owner elects arbitration, in its sole discretion, in addition to the other rules of the American Arbitration Association applicable to any arbitration hereunder, the following shall apply:

.1 Promptly after the impaneling of the arbitrator, the arbitrator shall establish a procedure for each party to set forth in writing and to serve upon each other party a detailed statement of its contentions of fact and law, along with appropriate responses thereto;

.2 All parties to the arbitration shall be entitled to reasonable discovery procedures as provided by the Illinois Code of Civil Procedure and Illinois Supreme Court Rules, as supplemented by rules to be established by the arbitrator;

.3 The arbitration shall be commenced and conducted as expeditiously as possible consistent with affording reasonable discovery as provided herein. Similarly, the scope of discovery, and the extent of proceedings hereunder relating to discovery, shall be consistent with the parties' intent that the arbitration be conducted as expeditiously as possible.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. In the event of any litigation or arbitration between the parties hereunder, the Contractor shall pay the Owner's reasonable attorneys' fees and court costs to the extent the court or tribunal determines the Owner is the prevailing party.

~~§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.~~

~~§ 15.4.4 Consolidation or Joinder~~

~~§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).~~

~~§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.~~

~~§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.~~

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, Christopher R. Gorman, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 14:56:23 ET on 12/20/2023 under Order No. 4104243507 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A201™ – 2017, General Conditions of the Contract for Construction, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)

AIA® Document A101® – 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the TBD day of TBD in the year TBD
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

Village of Addison
1 Friendship Plaza
Addison, IL 60101

and the Contractor:
(Name, legal status, address and other information)

TBD

for the following Project:
(Name, location and detailed description)
North Treatment Plant Renovations Project
Village of Addison
1 Friendship Plaza
Addison, IL 60101

The Architect:
(Name, legal status, address and other information)

Strand Associates, Inc.
1170 South Houbolt Road
Joliet, IL 60431

For purposes of this Agreement, the term "Architect" and the term "Engineer" shall be used interchangeably in the Contract Documents.

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

TABLE OF ARTICLES

1	THE CONTRACT DOCUMENTS
2	THE WORK OF THIS CONTRACT
3	DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
4	CONTRACT SUM
5	PAYMENTS
6	DISPUTE RESOLUTION
7	TERMINATION OR SUSPENSION
8	MISCELLANEOUS PROVISIONS
9	ENUMERATION OF CONTRACT DOCUMENTS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to the execution of this Agreement, and other documents included in the Project Manual dated [TBD] ("Project Manual"), including but not limited to the A201-2017 Village of Addison Standard General Conditions for All Projects ("A201 General Conditions"), other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

☒ [X] The date of this Agreement.

☐ [] A date set forth in a notice to proceed issued by the Owner.

☐ [] Established as follows:

(Insert a date or a means to determine the date of commencement of the

Paragraphs deleted)

Work.) If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

☒ [X] By the following date: **TBD**

§ 3.3.2 Reserved.

(Table deleted)

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be [TBD] (\$TBD), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
TBD	TBD

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.
(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
TBD	TBD	TBD

§ 4.3 Allowances, if any, included in the Base Bid and Contract Sum as described in the Project Manual, which shall be used at the sole discretion of the Owner upon written approval:
(Identify each allowance.)

Item	Price
TBD	TBD

§ 4.4 Unit prices, if any, are those included in the Contractor's Bid Documents, submitted by the Contractor to the Owner on or about [DATE], and attached hereto as Exhibit A.:
(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

.Item	Units and Limitations	Price per Unit (\$0.00)
TBD	TBD	

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

shall be in the amount of \$[TBD] per day beyond the date established for Substantial Completion, as described in the A201 General Conditions.

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

Not applicable.

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the first day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the first day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than sixty (60) days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment. To the extent applicable, all Applications for Payment shall be accompanied by Lien Waivers from the Contractor and applicable Subcontractors. The Lien Waivers when taken together shall equal the sum due under the respective application.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with the A201 General Conditions, as modified by Owner and included in the Project Manual, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of the A201 General Conditions, as modified by Owner and included in the Project Manual;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of the A201 General Conditions, as modified by Owner and included in the Project Manual; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to final payment, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

Ten (10%) Percent

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

Not applicable.

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

In the Owner's sole discretion.

§ 5.1.7.3

(Paragraphs deleted)

Reserved.

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of A201 General Conditions, as modified by Owner and included in the Project Manual..

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, including retainage held pursuant to Section 5.1.7, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of the A201 General Conditions, as modified by Owner and included in the Project Manual, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment.

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

Payments due and unpaid shall bear interest only as provided in the Local Government Prompt Payment Act, 50 ILCS 505/1, *et seq.*

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker to the extent provided in Article 15 of the A201 General Conditions, as modified by Owner and included in the Project Manual, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.

(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

Not applicable.

§ 6.2 Binding Dispute Resolution

For any dispute arising under this agreement, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

☐ Arbitration pursuant to Section 15.4 of AIA Document A201-2017

☐ Litigation in a court of competent jurisdiction

Init.

[X] Other (Specify)

As provided in the A201 General Conditions, as modified by Owner and included in the Project Manual.

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 7.1.1 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of the A201 General Conditions, as modified by Owner and included in the Project Manual, then the Owner shall pay the Contractor a termination fee as
(Paragraphs deleted)
set forth in that section.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of the A201 General Conditions, as modified by Owner and included in the Project Manual.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017, that reference refers to the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 8.2 The Owner's representative:
(Name, address, email address, and other information)

Ryan Hayden
Village of Addison
711 N. Addison Rd
Addison, IL 60101

§ 8.3 The Contractor's representative:
(Name, address, email address, and other information)

[TBD]

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in Article 11 of the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 8.5.2 The Contractor shall provide bonds as set forth in Article 11 of the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 8.6 Notice in electronic format, pursuant to Article 1 of the A201 General Conditions, as modified by Owner and included in the Project Manual, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 8.7 Other provisions

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User Notes:

(795224921)

As specified in the A201 General Conditions, as modified by Owner and included in the Project Manual, the Contractor shall pay prevailing wages for the Work as determined by the Illinois Department of Labor, and shall make, keep and submit certified payrolls through the Illinois Department of Labor's portal at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx>, and shall comply with all requirements of the Prevailing Wage Act, 820 ILCS 130/0.01 *et seq.*

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor
- .2 Reserved.
- .3 AIA Document A201™-2017, General Conditions of the Contract for

(Paragraphs deleted)

Construction, as modified by Owner and incorporated herein as the A201 General Conditions.

- .4 Reserved.
- .5 Drawings include all those issued in connection with the Project Manual.
- .6 Specifications:

(Table deleted)

(Paragraph deleted)

The Specifications include all terms, conditions, and specifications included in the Project Manual.

(Table deleted)

- .7 Addenda, if any:

Number	Date	Pages
TBD	TBD	TBD

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

- .8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

- ☐ AIA Document E204™-2017, Sustainable Projects Exhibit, dated as indicated below:
(Insert the date of the E204-2017 incorporated into this Agreement.)

- ☐ The Sustainability Plan:

Title	Date	Pages
Not applicable.	Not applicable.	Not applicable.

- ☒ Without limitation as to any document not listed, Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
Exhibit A	Bid Submittals	TBD	TBD
Exhibit B	Insurance Submittals	TBD	

- .9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™-2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Init.

This Agreement entered into as of the day and year first written above.

OWNER *(Signature)*
| Rich Veenstra, Mayor

(Printed name and title)

CONTRACTOR *(Signature)*

(Printed name and title)



Additions and Deletions Report for

AIA® Document A101® – 2017

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 15:50:59 ET on 12/12/2023.

PAGE 1

AGREEMENT made as of the TBD day of TBD in the year TBD

...

Village of Addison
1 Friendship Plaza
Addison, IL 60101

...

TBD

...

North Treatment Plant Renovations Project
Village of Addison
1 Friendship Plaza
Addison, IL 60101

...

Strand Associates, Inc.
1170 South Houbolt Road
Joliet, IL 60431

For purposes of this Agreement, the term "Architect" and the term "Engineer" shall be used interchangeably in the Contract Documents.

PAGE 2

EXHIBIT A – INSURANCE AND BONDS

...

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to the execution of this Agreement, and other documents included in the Project Manual dated [TBD] ("Project Manual"), including but not limited to the A201-2017 Village of Addison Standard General Conditions for All Projects ("A201 General Conditions"), other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

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User Notes:

(795224921)

...

[X] The date of this Agreement.

...

(Insert a date or a means to determine the date of commencement of the ~~Work~~)

~~If Work.~~ If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

...

[] ~~Not later than () calendar days from the date of commencement of the Work.~~

[] ~~By the following date:~~ X By the following date: TBD

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Reserved.

Portion of Work

Substantial Completion Date

PAGE 3

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be (\$ ~~—~~), [TBD] (\$TBD), subject to additions and deductions as provided in the Contract Documents.

...

TBD

TBD

...

TBD

TBD

TBD

§ 4.3 Allowances, if any, included in the ~~Contract Sum~~ Base Bid and Contract Sum as described in the Project Manual, which shall be used at the sole discretion of the Owner upon written approval:

...

TBD

TBD

§ 4.4 Unit prices, if ~~any~~ any, are those included in the Contractor's Bid Documents, submitted by the Contractor to the Owner on or about [DATE], and attached hereto as Exhibit A.:

...

Item Item

Units and
Limitations

Price per Unit (\$0.00)

TBD

TBD

...

shall be in the amount of \$[TBD] per day beyond the date established for Substantial Completion, as described in the A201 General Conditions.

...

Not applicable.

PAGE 4

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

month.

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the first day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the first day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than (—) sixty (60) days after the Architect receives the Application for Payment.

...

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment. To the extent applicable, all Applications for Payment shall be accompanied by Lien Waivers from the Contractor and applicable Subcontractors. The Lien Waivers when taken together shall equal the sum due under the respective application.

...

§ 5.1.6 In accordance with ~~AIA Document A201™ 2017, General Conditions of the Contract for Construction, the A201 General Conditions, as modified by Owner and included in the Project Manual,~~ and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

...

- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of ~~AIA Document A201–2017; the A201 General Conditions, as modified by Owner and included in the Project Manual;~~

...

- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of ~~AIA Document A201–2017; the A201 General Conditions, as modified by Owner and included in the Project Manual;~~ and

...

§ 5.1.7.1 For each progress payment made prior to ~~Substantial Completion of the Work,~~ the final payment, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

...

Ten (10%) Percent

PAGE 5

Not applicable.

...

In the Owner's sole discretion.

~~§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:~~

~~(Insert any other conditions for release of retainage upon Substantial Completion.)~~

Reserved.

~~§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201-2017.~~ A201 General Conditions, as modified by Owner and included in the Project Manual.

...

~~§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, including retainage held pursuant to Section 5.1.7, shall be made by the Owner to the Contractor when~~

- ~~.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201-2017, the A201 General Conditions, as modified by Owner and included in the Project Manual, and to satisfy other requirements, if any, which extend beyond final payment; and~~

...

~~§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:~~

Payment.

...

~~% Payments due and unpaid shall bear interest only as provided in the Local Government Prompt Payment Act, 50 ILCS 505/1, et seq.~~

...

~~The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201-2017, to the extent provided in Article 15 of the A201 General Conditions, as modified by Owner and included in the Project Manual, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.~~

...

Not applicable.

...

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201-2017, dispute arising under this agreement, the method of binding dispute resolution shall be as follows:

PAGE 6

☒ Other (Specify)

As provided in the A201 General Conditions, as modified by Owner and included in the Project Manual.

...

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of ~~AIA Document A201-2017~~, the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 7.1.1 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of ~~AIA Document A201-2017~~, the A201 General Conditions, as modified by Owner and included in the Project Manual, then the Owner shall pay the Contractor a termination fee as follows:

~~(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)~~

set forth in that section.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of ~~AIA Document A201-2017~~, the A201 General Conditions, as modified by Owner and included in the Project Manual.

...

§ 8.1 Where reference is made in this Agreement to a provision of ~~AIA Document A201-2017 or another Contract Document~~, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents A201-2017, that reference refers to the A201 General Conditions, as modified by Owner and included in the Project Manual.

...

Ryan Hayden
Village of Addison
711 N. Addison Rd
Addison, IL 60101

...

[TBD]

...

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in ~~AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents~~, Article 11 of the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 8.5.2 The Contractor shall provide bonds as set forth in ~~AIA Document A101™-2017 Exhibit A, and elsewhere in the Contract Documents~~, Article 11 of the A201 General Conditions, as modified by Owner and included in the Project Manual.

§ 8.6 Notice in electronic format, pursuant to Article 1 of ~~AIA Document A201-2017~~, the A201 General Conditions, as modified by Owner and included in the Project Manual, may be given in accordance with AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

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User Notes:

(795224921)

...

§ 8.7 Other provisions:provisions

As specified in the A201 General Conditions, as modified by Owner and included in the Project Manual, the Contractor shall pay prevailing wages for the Work as determined by the Illinois Department of Labor, and shall make, keep and submit certified payrolls through the Illinois Department of Labor's portal at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx>, and shall comply with all requirements of the Prevailing Wage Act, 820 ILCS 130/0.01 *et seq.*

PAGE 7

- ~~.2~~ AIA Document A101™ 2017, Exhibit A, Insurance and Bonds Reserved.
~~.3~~ AIA Document A201™ 2017, General Conditions of the Contract for Construction
~~.4~~ AIA Document E203™ 2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

(Insert the date of the E203-2013 incorporated into this Agreement.) Construction, as modified by Owner and incorporated herein as the A201 General Conditions.

~~.4~~ Reserved.

~~.5~~ Drawings. 5 Drawings include all those issued in connection with the Project Manual.

~~.6~~ Specifications:

Number	Title	Date
--------	-------	------

~~.6~~ Specifications

The Specifications include all terms, conditions, and specifications included in the Project Manual.

Section	Title	Date	Pages
---------	-------	------	-------

...

<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
------------	------------	------------

...

<u>Not applicable.</u>	<u>Not applicable.</u>	<u>Not applicable.</u>
------------------------	------------------------	------------------------

[☒] Without limitation as to any document not listed, Supplementary and other Conditions of the Contract:

...

<u>Exhibit A</u>	<u>Bid Submittals</u>	<u>TBD</u>	<u>TBD</u>
<u>Exhibit B</u>	<u>Insurance Submittals</u>	<u>TBD</u>	

PAGE 8

Rich Veenstra, Mayor

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, Christopher R. Gorman, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 15:50:59 ET on 12/12/2023 under Order No. 4104243507 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A101™ – 2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)

VILLAGE OF ADDISON

INSTRUCTIONS TO PARTICIPANTS

A. Conditions for RFP

1. Definitions

a) “Addenda” or “Addendum” are written or graphic instruments issued prior to the RFP opening which modify or interpret the RFP Documents, including drawings and specifications, by additions, deletions, clarifications, or corrections. Addenda shall become part of the Contract Documents. It is the responsibility of each participant to verify that he has received all Addenda prior to submitting the RFP. It is also the responsibility of each participant to verify that all subcontractors and material suppliers whose prices are incorporated in the participant's RFP are familiar with the RFP Documents in their entirety, including all Addenda issued up to the time of RFP opening.

b) “RFP Documents” include the Invitation to RFP, RFP Instructions, and the RFP Forms, including all Contractor Certifications, General Conditions, Supplementary and/or Special Conditions, if any, Drawings, Specifications, and any Addenda issued up to the time of RFP opening.

c) “Contract” shall mean the Contract the successful participant enters into with the Village for performance of the work in accordance with the specifications and drawings included in these RFP Documents, substantially in the same form and included in these RFP Documents.

d) Contract Documents include all the RFP Documents, the final Contract executed between the Village and successful Contractor for this Project, the Performance Bond and Labor Material Payment Bonds, if required, and proof of insurance.

e) “Engineer” for this project shall be Strand Associates, Inc ®, 1170 Houbolt Road, Joliet, IL 60431. Engineer provided the design of the project, and shall provide construction phase services as described in their agreement with the Village of Addison. The Engineer shall be insured and indemnified in the same manner as the Village of Addison.

2. RFP Documents

All items that are currently available for RFP will be posted on the Village of Addison’s website, www.addisonadvantage.org. By registering on the Village’s website, participants may view and download the RFP Documents. Addenda, if issued, will be posted on the website. It is the responsibility of each participant to view said site prior to RFP submittal to insure review of all current specifications and/or Addendum, if any.

The RFP Documents are also available in printed format from the Village's Administrative Office at 1 Friendship Plaza, Addison, Illinois. For more information, please see the RFP Specifications or contact the Village’s Purchasing Agent at 630-693-7507.

3. Submission of RFP

a) The RFP shall be submitted on the forms provided in these RFP Documents (collectively, the “RFP Forms”). These RFP Forms shall be completed properly and signed in ink. Failure to use the RFP Forms included in these RFP Documents could result in rejection of the RFP.

b) The RFP Forms shall be submitted in a sealed opaque envelope addressed to the Village of Addison, 1 Friendship Plaza, Addison Illinois 60101, ATTN: PURCHASING, and shall be identified with the RFP number and project name. Included in the sealed envelope shall be a USB Flash Drive, or alternative data storage device approved by the Purchasing Agent, containing an electronic copy of the final RFP Forms in their entirety. The Village may, in its sole discretion, waive the requirement of an electronic copy of the RFP Forms.

c) RFP documents shall be delivered or mailed in time for delivery to the foregoing address no later than the date and time provided in the Invitation to RFP. Oral RFPs or oral modifications to RFP will not be considered. It is the sole responsibility of the participant to see that his RFP is received in proper time. **No faxed or e-mail RFP or modification of a RFP will be considered.** The Village is not responsible for the premature opening of RFPs not marked as required. Any RFP opened prematurely due to the failure of the participant to mark the envelope in accordance with these RFP Documents will be considered non-responsive.

d) RFP prices are to include the delivery of all materials (if any) including: plant, equipment, supplies, tools, scaffolding, transportation, insurance, bonds, warranties and all other items and facilities, and the performance of all labor and service, necessary for the proper completion of the work except as may be otherwise expressly provided in the Contract. RFPs shall not include federal excise tax or state sales tax for materials to be incorporated in, or totally consumed in the prosecution of the work. An exemption certificate will be furnished by the Village upon request of the participant.

e) Erasures, interlineations, corrections, or other changes on the Contractor’s RFP Forms shall be explained or noted over the signature of the participant. No RFP submitted with deviations or reservations from the full contract called for will be considered.

f) Participants must acknowledge all Addenda received in the spaces provided on the RFP Form. By submitting a RFP, participant indicates that all considerations issued by Addendum are incorporated in the RFP. All bids must include all required information, alternates, signatures or other forms required by the RFP specifications or instructions to be considered responsive. The Village, in its sole discretion, shall determine whether such requirement be waived.

g) Participants are required to complete certain certifications as part of its RFP regarding the participant's compliance with applicable laws. **Failure of a participant to complete/submit the required certifications shall be the basis for immediate rejection of that participant's RFP.** The certifications of the successful participant shall become a part of the Contract with the Village.

Requests to withdraw RFP are to be directed to the attention of the Village Purchasing Agent and may be sent via certified mail or email:

Attn: Ewa Adamow
Village of Addison
1 Friendship Plaza
Addison, Illinois 60101
Email: purchasing@addison-il.org

4. Examination of RFP Documents

a) Each participant shall carefully examine all Contract Documents and all Addenda thereto and shall thoroughly familiarize himself with the detailed requirements thereof prior to submitting a RFP. Should a participant find discrepancies or ambiguities in, or omissions from documents, or should he be in doubt as to their meaning, he shall at once, and in any event not later than ten (10) calendar days prior to the RFP due date, notify the Purchasing Agent, who will, if necessary, send written Addenda to all participants of record. The Village will not be responsible for any oral instructions. All inquiries shall be directed to the Purchasing Agent, Ewa Adamow, 630-693-7507 or purchasing@addison-il.org. After RFPs are received, no allowance will be made for oversight by the participant.

b) The failure or omission of any participant to obtain, receive or examine any form, instrument, or information or to visit the Project site(s), and become knowledgeable with respect to conditions there existing, or to seek needed clarification shall in no way relieve the participant from any obligation with respect to his RFP. By submitting a RFP, the participant agrees, represents and warrants that he has undertaken such investigation as he deemed necessary, has examined the site(s) and the Bidding Documents, has obtained all needed clarifications and where the specifications and drawings require in any part of the work that a given result be produced, that the specifications and drawings are adequate and the required result can be produced under the specifications and drawings. Once the award has been made, failure to have undertaken and completed the foregoing tasks shall not be cause to alter the original Contract or to request additional compensation.

5. Mistake in RFP and RFP Changes

Any participant may modify his RFP by written notice at any time prior to the scheduled closing time for receipt of RFPs, provided that such written notice is received by Village prior to the closing time. No RFP may be modified after submittal; however, if an error is made in extending a total price, the unit price will govern. Erasures on the RFP Form must be initialed by the participant. If an error or omission is discovered in the RFP Documents after the RFP opening, the Village reserves the right: a) to determine whether to require the submission of new RFPs; or b) if the error or omission is of such a nature that it was reasonably discoverable upon a careful review of the RFP Documents, to award the Contract to the lowest responsive and responsible participant as determined by the Village and to require that Contractor to perform the work in accordance with an issued correction by the Village and for the amount proposed in RFP by the Contractor. Such decisions are

final and not subject to recourse. Errors and omissions made by the participant cannot be corrected after the RFP opening and shall be considered binding unless waived by the Village.

6. Withdrawal of RFP

Bidders may withdraw or cancel their RFP at any time prior to the advertised RFP opening time by signing and submitting a request for said withdrawal. Unless otherwise specified, no RFP shall be withdrawn or canceled for sixty (60) calendar days following the RFP opening date and shall remain binding for this period of time.

7. Changes in Contract Documents

a) Changes, corrections or interpretations of the Contract Documents may be made by the Village before RFPs are received. In such case, a written Addendum describing the change or corrections will be issued by the Village to all bidders of record and such Addendum shall become part of the Contract Documents. Except in unusual cases, Addenda will be issued at least four (4) calendar days prior to date established for receipt of RFPs.

b) It is the responsibility of each participant to verify that he has received all Addenda prior to submitting a RFP. It is also the responsibility of each participant to verify that all subcontractors and material suppliers whose prices are incorporated in the participant's RFP are familiar with the RFP Documents in their entirety, including all Addenda issued up to the time of RFP opening.

8. Substitutions During RFP

a) Unless otherwise indicated, the use of brand names in the specifications is used for the purpose of establishing a grade or quality. Participants proposing to use an alternate that is equal to or superior to in every respect to that required by the specifications must request approval in writing to the Village at least seven (7) business days prior to the RFP opening and mark the item as 'or approved equal'.

b) Additionally, participants requesting approval for use of an alternate must provide certification by the manufacturer that the substitute proposed is equal to or superior in every respect to that required by the Contract Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated. The participant, in submitting the request for substitution, waives the right to additional payment or an extension of Contract Time because of the failure of the substitute to perform as represented in the request for substitution.

c) The Village may request additional information or documentation necessary for evaluation of the request for substitution. The Village will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the RFP Documents. The Village's approval of a substitute during proposal process does not relieve the

Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents, including but not limited to proper performance of all components of the work and suitability for the uses specified.

d). RFPs proposing alternates not previously approved by the Village will be considered non-responsive and rejected. The Village reserves the right to determine whether a substituted selection, in its judgment, is equal to or better quality and therefore an acceptable alternate. Such decisions are final and not subject to recourse.

9. RFP Attachments

Participants may attach to the RFP form any descriptive material necessary to fully describe the work he or she proposes to furnish in accordance with the specifications.

10. Participant's Competence

a) Participants must be able to demonstrate that they: i) have experience in performing and have successfully performed and are still actively engaged in performing work similar in kind and scope to the work of the Project; and ii) are able to show that they have adequate laborers and materials to successfully complete the work as indicated in the RFP Documents and within the time required by the RFP Documents.

b) On the participant's References List provided herein, list projects your organization has completed in the past five (5) years, which are comparable in scope, giving the name of the project, the project description, project address, owner and telephone number.

c) The participant shall not have been debarred or determined ineligible for public contracts by any governmental agency.

d) The Village may also require proof of facilities or equipment, insurance coverage and financial resources to perform the work. If required, the participant shall submit to the Village a properly executed Contractor's Qualification Statement, AIA Document A305.

e) The Village reserves the right to require of any participant any other information to verify a participant's qualifications and financial status and to withhold formal signing of the contract until such information is received.

11. RFP Opening

At the precise time set for RFP opening, RFPs will legally be made public. Participants or their representatives are encouraged to attend the RFP opening.

12. Indemnity Hold Harmless Agreement

All participants must sign and notarize the attached Indemnity Hold Harmless Agreement included in these RFP Documents.

13. Prevailing Wages

The work of this Project is subject to the Illinois *Prevailing Wage Act*, 820 ILCS 130/0.01 *et seq.* A prevailing wage determination has been made by the Illinois Department of Labor for public works projects in DuPage County. The Contractor shall pay prevailing wages in accordance with and shall fully comply with all requirements of the Prevailing Wage Act, 820 ILCS 130/0.01, *et seq.*, including those set forth in Section 13.1.3.1 herein. This Agreement calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/0.01 *et seq.* ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates, and the contractor/subcontractor has an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website. All Contractors, Subcontractors, and sub-subcontractors rendering services under this Agreement must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.

B. Award or Rejection of RFPs

1. Award or Rejection

a) The Village shall award the Contract to the lowest responsive, most responsible Contractor as determined by and in the sole discretion of the Village.

b) In determining the responsibility of a Contractor, the following are taken into consideration, among other factors:

i) The ability of Contractor to provide experienced labor sufficient in numbers to timely and properly complete the services;

ii) The character, integrity, reputation, judgment, experience, serviceability and efficiency of the Contractor;

iii) The current, uncompleted work in which a Contractor is involved, which might hinder or prevent prompt completion of the Village's work;

iv) The financial resources of the Contractor;

v) Quality, utility, suitability of work or material; the quality of the commodity to be furnished, as well as the price therefore, is to be taken into consideration, and a RFP which is low in point of price may be rejected if the material to be furnished is not the best;

vii) Contractor's conformity with the specifications and RFP instructions;
and

viii) Prior work completed by the Contractor for the Village.

c) The Village reserves the right to (i) reject all RFPs; (ii) reject only certain RFPs which are non-conforming or non-responsive to the RFP requirement by waiving variances from the specifications and RFP instructions pursuant to law s; (iii) accept only a portion, part or specific items of work of all and reject others, as the Village shall in its sole discretion determine to be in its best interest; and/or (iv) award the Contract to the responsible participant submitting the lowest RFP responsive to the bidding requirements. No RFP will be accepted from or Contract awarded to any person, firm or corporation that is in arrears or is in default to the Village upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to said Village or that has failed to perform faithfully any previous contract with the Village.

d) The Village shall have the right to accept Alternates in any order or combination, and to determine the low participant on the basis of the sum of the Base RFP and Alternates accepted.

e) RFPs will be awarded to one participant for the entire Project or to any series of bidders for an appropriate proportion of the Project.

2. Notice of Award

The acceptance of a RFP will be by a Notice of Award, signed by a duly authorized representative of the Village; no other act by the Village shall constitute the acceptance of a RFP. The acceptance of a RFP by the Village shall bind the successful participant to execute and perform the work of the Contract. The successful participant to whom the Contract is awarded by the Village shall sign and deliver to the Village for execution by the Village all required copies of the Contract, along with all required insurance and surety documents within ten (10) days after presentation to him of the Contract for signature. In case the participant shall fail or neglect to do so, he will be considered as having abandoned the Contract, and as being in default to the Village. The Village may thereupon re-advertise or otherwise award said Contract and forfeit the RFP Deposit.

C. **Surety**

1. All RFPs must be accompanied by a surety in the amount of not less than ten percent (10%) of the RFP. The surety must be in the form of a Bid Bond and must be signed by a surety company authorized to do business in Illinois. The amount of the bond shall be clearly stated on the Bid Bond form. This is the Village's guarantee that Contractor will execute an agreement and file Performance Bond, Labor and Material Bond and insurance with RFP submission as provided in the RFP specifications. Any RFP submitted that does not include a Bid Bond will be rejected.

2. All but the three lowest bidders' deposits will be returned as soon as possible after RFP opening. All remaining bond deposit will be returned upon the Village's receipt from the successful Contractor of an acceptable Performance Bond and Labor and Material Payment Bond, Certificate of Insurance naming the Village as the certificate holder and as an additional insured, and the successful Contractor has signed and returned to the Village the Contract for the work presented by the Village.

D. Performance Bond and Labor and Material Bond

1. Requirements

Contractor will be required to furnish to the Village a Performance Bond and a Labor and Material Payment Bond (using a form similar to AIA document 312, or its current equivalent) in the full amount of its Contract. The bond shall be cosigned by a surety company licensed to conduct business in the State of Illinois and with at least an "A" rating and a financial rating of at least "X" in the latest edition of the Best Insurance Guide. Said bond shall guarantee the faithful performance of the work in accordance with the Contract, the payment of all indebtedness incurred for labor and materials, and guarantee correction of work. The cost of each bond shall be included in the Contract Sum. The Contractor and all subcontractors shall name the Village as an obligee on all bonds. Said bonds shall meet the requirements of the Illinois Public Construction Bond Act, 30 ILCS 550/0.01 *et seq.* and any further amendments thereto. Contractor shall include in its Performance Bond and Labor and Material Payment Bond such language as shall guarantee the faithful performance of the Prevailing Wage Act as required in these Bidding Documents. The bonds shall be submitted to the Village within ten (10) calendar days after the award of the RFP, and are a condition precedent to the execution of a contract by the Village. The Village reserves the right, within its sole discretion, to approve or disapprove the Performance Bond and the Labor and Material Payment Bond submitted by Contractor. The Performance Bond and Labor and Material Payment Bond will become a part of the Contract. Please refer to AIA Document A201-2017 Article 11 for additional information.

2. Failure to Furnish Bond

In the event Contractor fails to furnish a performance and payment bond after award of a RFP, the Village may exercise its right under the bond, if received. Alternatively, the bond surety shall be retained by the Village of Addison as liquidated damages and not as penalty, it being now agreed that sum is a fair estimate of damages that said Village will sustain due to the Contractor's failure to furnish said bond. Further, the failure of the

successful Contractor to enter into the Contract and supply the required bonds and evidence of insurance within the required timeframe, or within such extended period as the Village may grant, shall constitute a default, and the Village may either award the Contract to the next responsible Contractor, or re-advertise for RFPs. In the event of a default, the Village need not return the defaulting participant's bond surety and may charge against the defaulting bidder for the full difference between the amount for the RFP and the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the defaulting participant's bid surety, provided that the Village's retention of the bid guarantee shall not preclude the Village from holding the Contractor fully liable for any and all damages which are in excess of said partial liquidated damages, and which shall otherwise be incurred by the Village, including reasonable attorneys' fees, arising from the participant's failure to enter into said Contract and to deliver the same back to the Village within said ten (10) calendar days period.

E. Freedom of Information Act

All procurement information concerning this RFP shall be a public record to the extent provided in the Illinois Freedom of Information Act (5 ILCS 140/1 *et seq.*) and shall be made available upon request for the same as provided thereunder.

IMPORTANT NOTICE OF RESPONSIBILITY FOR
PERIODIC REVISIONS TO PREVAILING WAGE RATES

Revisions of the Prevailing Wage Rates are made periodically by the Illinois Department of Labor (IDOL). As required by the Illinois Prevailing Wage Act, the Contractor/subcontractor has an obligation to check IDOL's web site for revisions to prevailing wage rates. These revisions may be accessed by computer at <http://labor.illinois.gov/>. Bidders and Contractors performing work on this Project are responsible for determining the applicable prevailing wage rates at the time of RFP submission and performance of the work. Failure of a participant/Contractor to make such determination shall not relieve it of its obligations in accordance with the Contract Documents. In consideration for the award to it of the Contract for this Project, the Contractor agrees that the foregoing notice satisfies any obligation of the public body in charge of this Project to notify the Contractor of periodic changes in the prevailing wage rates and the Contractor agrees to assume and be solely responsible for, as a material obligation of the Contractor under the Contract, the obligation to determine periodic revisions of the prevailing wage rates, to notify its subcontractors of such revisions, to post such revisions as required for the posting of wage rates under the Act, and to pay and require its subcontractors to pay wages in accordance with such revised rates.

To the extent that federal funds are used to fund the project, the Davis-Bacon Act may be applicable.

VILLAGE OF ADDISON CONTRACTOR'S CERTIFICATION

THE UNDERSIGNED CONTRACTOR HEREBY ACKNOWLEDGES, CERTIFIES, AFFIRMS AND AGREES AS FOLLOWS:

(1) Pursuant to 720 ILCS 5/33E-1 *et seq.* the undersigned contractor is not barred from bidding on the contract as a result of violation of either Section 33 E-3 or 33-4 or that Act. Contractor also certifies that no officers or employees of the contractor have been so convicted and that contractor is not the successor company or a new company created by the officers or owners of one so convicted. Contractor further certifies that any such conviction occurring after the date of this certification will be reported to the Village of Addison immediately in writing, if it occurs during the bidding process, or otherwise prior to entering into the contract therewith.

(2) The contractor further certifies that the contractor is not barred from contracting with the Village of Addison because of any delinquency in the payment of any tax administered by the Illinois Department of Revenue or,

a) is contesting such liability or the amount of tax in accordance with procedures established by the appropriate revenue act, or

b) has entered into an agreement with the Department of Revenue for payment of all taxes due and is in compliance with that Agreement.

Contractor further certifies that it understands that making a false statement regarding delinquency in taxes is a Class A misdemeanor and, in addition, voids the contract and allows the Village of Addison, a municipal entity, to recover in a civil action all amounts paid to the contractor.

(3) Contractor shall abide by and comply with, and in contracts which it has with all persons providing any of the services or work on this Project on its behalf shall require compliance with, all applicable Federal, State and local laws and rules and regulations including without limitation those relating to a) fair employment practices, affirmative action and prohibiting discrimination in employment; b) workers' compensation; c) workplace safety; d) wages and claims of laborers, mechanics and other workers, agents, or servants in any manner employed in connection with contracts involving public funds or the development or construction of public works, buildings or facilities; and e) steel products procurement.

(4) To the best of Contractor's knowledge, no officer or employee of Contractor has been convicted of bribery or attempting to bribe an officer or employee of the State of

Illinois, or any unit of local government, nor has any officer or employee made an admission of guilt of such conduct which is a matter of record.

(5) Neither Contractor nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

(6) The Contractor shall comply with the requirements and provisions of the Freedom of Information Act (5 ILCS 140/1 *et. seq.*) and, upon request of the Village of Addison's designated Freedom of Information Act Officer (FOIA Officer), Contractor shall within two (2) business days of said request, turn over to the FOIA Officer any record in the possession of the Contractor that is deemed a public record under FOIA.

Dated: _____

(Company)

(Mailing Address)

(Area Code) (Phone Number)

Primary Contact (Signature), Title

(Signature)

SUBSCRIBED and sworn to before me this _____ day of _____, _____

(Notary Public)

**VILLAGE OF ADDISON
COMPLIANCE WITH ILLINOIS
HUMAN RIGHTS ACT**

NOTE: THIS AFFIDAVIT MUST BE EXECUTED AND SUBMITTED WITH THE SIGNED CONTRACT FORM. NO CONTRACTS WILL BE ACCEPTED BY THE BOARD OF TRUSTEES OF THE VILLAGE OF ADDISON UNLESS SAID AFFIDAVIT IS SUBMITTED CONCURRENTLY WITH THE CONTRACT.

(Name)
being first duly sworn, deposes and says that he/she is the

(Title)

of _____
(Name of Company)

and that he/she has authority to make the following affidavit; that he/she has knowledge of the Village of Addison RFP Specifications and Documents relating to Illinois Human Rights Act (775 ILCS 5/1-101 *et seq.*), and knows and understands the contents thereof; that he/she certifies hereby that it is the policy of

(Name of Company)

to recruit, hire, train, upgrade, promote and discipline its employees without regard to his or her race, color, religion, sex, national origin, ancestry, age, order of protection status, marital status, physical or mental disability, military status, sexual orientation, pregnancy, or unfavorable discharge from military service; and that the Company has and enforces policies which prohibit sexual harassment in the workplace as set forth in the Act.

The undersigned further certifies that the company named above has, pursuant to Section 5/2-105 of the Illinois Human Rights Act (775 ILCS 5/2-105), a written sexual harassment policy that includes, at a minimum, the following information: (i) a statement on the illegality of sexual harassment; (ii) the definition of sexual harassment under State law; (iii) a description of sexual harassment utilizing examples; (iv) the company's internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and directions on how to contact both; and (vi) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act. The undersigned further certifies that such policy shall remain in full force and effect. A copy of the policy shall be provided to the Illinois Department of Human Rights upon request.

(Signature)

SUBSCRIBED and sworn to before me this _____ day of _____, _____

(Notary Public)

EQUAL EMPLOYMENT OPPORTUNITY

Section I. This EQUAL EMPLOYMENT OPPORTUNITY CLAUSE is required by the Illinois Human Rights Act and the Rules and Regulations of the Illinois Department of Human Rights published at 44 Illinois Administrative Code Section 750, et seq.

Section II. In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause or the Act, 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 other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the contractor agrees as follows:

A. That he or she will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service; and, further, that he or she will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any underutilization.

B. 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 this Part) 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.

C. 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, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.

D. 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 the labor organization or representative of the contractor's obligations under the Act and this Part. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with the Act and this Part, the contractor will promptly notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.

E. That he or she will submit reports as required by this Part, 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 Act and this Part.

F. 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 Act and the Department's Rules and Regulations.

G. 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 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.

Section III. For the purposes of subsection G of Section II, "subcontract" means any agreement, arrangement or understanding, written or otherwise, between a public contractor and any person under which any portion of the public contractor's obligations under one or more public contracts is performed, undertaken or assumed. The term "subcontract", however, shall not include any agreement, arrangement or understanding in which the parties stand in the relationship of an employer and an employee, or between a bank or other financial institution and its customers.

ACKNOWLEDGED AND AGREED TO:

NAME OF CONTRACTOR: _____

BY: _____

TITLE: _____

ATTEST: _____

DATE: _____

**VILLAGE OF ADDISON
ANTI-COLLUSION AFFIDAVIT OF COMPLIANCE**

_____, being

first and duly sworn, deposes and says:

That he/she is _____ of

(Partner, Officer, Owner, etc.)

(Contractor)

and hereby acknowledges, certifies and affirms as follows:

This RFP proposal: (i) was made without any connection or common interest in the profits anticipated to be derived from the contract by contractor with any other persons submitting any RFP or proposal for the contract; (ii) the contract terms are in all respects fair and the contract will be entered into by contractor without collusion or fraud; (iii) no official, officer or employee of the Village of Addison has any direct or indirect financial interest in contractor's RFP proposal or in contractor, (iv) the contractor has not directly or indirectly provided, and shall not directly or indirectly provide, funds or other consideration to any person or entity (including, but not limited to, the Village of Addison and its employees and agents), to procure improperly special or unusual treatment with respect to this contract or for the purpose of otherwise improperly influencing the relationship between the Village of Addison and the contractor. Additionally, the contractor shall cause all of its officers, directors, employees, (as the case may be) to comply with the restrictions contained in the preceding sentence.

(Name of Contractor, if Contractor is an Individual)

(Name of Partner, if Partner is a Partnership)

(Name of Officer, if Contractor is a Corporation)

The above statements must be subscribed and sworn to before a notary public.

Subscribed and sworn to

This _____ day of _____.

By _____

(Notary Public)

**VILLAGE OF ADDISON
INDEMNITY HOLD HARMLESS AGREEMENT**

To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify and hold harmless the Village of Addison, its officials, agents and employees, and Engineer against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anyway accrue against the Village of Addison, its officials, agents and employees, and Engineer arising in whole or in part of in consequence of the performance of this work by the Contractor, its employees, or subcontractors, or which may in anyway result in therefrom, except that arising out of the sole legal cause of the Village of Addison, its agents or employees, or Engineer. The Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all cost and other expenses arising therefore or incurred in connections therewith, and, if any judgment shall be rendered against the Village of Addison, its officials, agents and employees, and Engineer, in any such action, the Contractor shall, at its own expense, satisfy and discharge the same.

Contractor expresses, understands and agrees that any performance bond or insurance policies required by this Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Village of Addison, its officials, agents and employees, and Engineer as herein provided.

The Contractor further agrees that to the extent that payment is due the Contractor by virtue of this Contract, such funds may be retained by the Village as shall be considered necessary in the judgment of the Village of Addison to protect itself against said loss until such claims, suits, or judgments shall have been settled or discharged and/or evidence to that extent shall have been furnished to the satisfaction of the Village of Addison.

CONTRACTOR:

ATTEST:

(Notary Public)

REFERENCE LIST- GENERAL

1. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____
2. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____
3. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____
4. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____
5. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____

REFERENCES-PUBLIC BODY

Please list all Public Bodies you have performed work for in the last five years.

1. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____

2. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____

3. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____

4. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____

5. Name: _____
Address: _____
Telephone #: (Area Code) _____
Contact: _____

Bidder Contact Information

**PLEASE LET US KNOW WHO WE SHOULD CONTACT
REGARDING THIS RFP.**

Please attach business card here

**IF YOU DO NOT HAVE A BUSINESS CARD, PLEASE TYPE YOUR
INFORMATION BELOW:**

Company Name: _____

Company Address: _____

City: _____ State: _____ Zip Code: _____

Name of Contact Person: _____

Title: _____ Phone Number: _____

E-mail: _____

**VILLAGE OF ADDISON
PROOF OF INSURABILITY**

PROPOSAL SUBMITTED BY:

(Contractor's Name)

(Address)

I, being duly sworn, do hereby acknowledge that I have read the insurance specifications herein and agree that the above contractor is eligible for insurance in accordance with the aforesaid specifications.

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

Signed: _____
(Authorized Agent)

Date: _____

Insurance Company: _____

Address: _____

(Notary Public)

**VILLAGE OF ADDISON
CERTIFICATE OF INSURANCE/EXPLANATION**

An original Certificate of Insurance form must be followed as shown, with no exceptions.

1. The companies affording coverages are shown with their complete name.
2. The policy numbers and dates are correct.
3. The verbiage in the “Cancellation” box is crossed out.
4. The “Description of Operations/Locations/Vehicles/Exclusions Added By Endorsement/Special Provisions” box on the form has the exact verbiage as on the example.
5. Carriers must maintain a Best’s rating of “A” with a “**Class VI**” or better.
6. Insurance coverage shall be in force for the duration of said project.
7. Contractors must ensure all subcontractors comply with all above requirements.
8. The policy supplied needs to comply with, and have limits stipulated in, AIA A201-2017 Article 11.

If you have any questions regarding the above, please contact the Village Purchasing Agent at (630) 693-7507.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.	
	INSURERS AFFORDING COVERAGE	NAIC #
INSURED	INSURER A:	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	<input checked="" type="checkbox"/>	GENERAL LIABILITY				EACH OCCURENCE	\$
		<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$
		<input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR				MED EXP (Any one person)	\$
		<input type="checkbox"/>				PERSONAL & ADV INJURY	\$
		<input type="checkbox"/>				GENERAL AGGREGATE	\$
		GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	\$
		<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC					\$
B	<input checked="" type="checkbox"/>	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Each Occurrence)	\$
		<input checked="" type="checkbox"/> ANY AUTO				BODILY INJURY (Per person)	\$
		<input type="checkbox"/> ALL OWNED AUTOS				BODILY INJURY (Per accident)	\$
		<input type="checkbox"/> SCHEDULED AUTOS				PROPERTY DAMAGE (Per accident)	\$
		<input type="checkbox"/> HIRED AUTOS					
		<input type="checkbox"/> NON-OWNED AUTOS					
		<input type="checkbox"/>					
		<input type="checkbox"/>					
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	\$
		<input checked="" type="checkbox"/> ANY AUTO				OTHER THAN AUTO ONLY:	EA ACC \$
		<input type="checkbox"/>				AGG	\$
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	\$
		<input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE				AGGREGATE	\$
		<input type="checkbox"/> DEDUCTIBLE					\$
		<input checked="" type="checkbox"/> RETENTION \$					\$
							\$
C	<input checked="" type="checkbox"/>	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below				E.L. EACH ACCIDENT	\$
						E.L. DISEASE - EA EMPLOYEE	\$
						E.L. DISEASE - POLICY LIMIT	\$
	<input type="checkbox"/>	OTHER					

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

Additional Insureds are added to the GL primary/noncontributory w/respect to work performed by the named Insured as required by signed written contract/agreement: Village of Addison

CERTIFICATE HOLDER	CANCELLATION
Village of Addison 1 Friendship Plaza Addison, IL 60101	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.
	AUTHORIZED REPRESENTATIVE

**VILLAGE OF ADDISON
CONTRACTOR'S DRUG-FREE WORKPLACE CERTIFICATION**

Pursuant to 30 ILCS 580/1 *et seq.* ("Drug-Free Workplace Act"), if the undersigned contractor has 25 more employees, the undersigned hereby certifies to the Village of Addison that it will provide a drug-free workplace by:

- A. Publishing a statement:
 - 1. Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace.
 - 2. Specifying the actions that will be taken against employees for violations of such prohibition.
 - 3. Notifying the employees that, as a condition of employment on such contract or grant, the employee will:
 - a) Abide by the terms of the statement; and
 - b) Notify the Village of Addison of any criminal drug statute conviction for a violation occurring in the workplace no later than 5 days after such conviction.
- B. Establishing a drug-free awareness program to inform the employees about:
 - a) The dangers of drug abuse in the workplace;
 - b) The contractor's policy of maintaining a drug-free workplace;
 - c) Any available drug counseling rehabilitation and employee-assistance program; and
 - d) The penalties that may be imposed upon employees for drug violations.
- C. Making it a requirement to give a copy of the statement required by subsection (A) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.
- D. Notifying the Village of Addison within 10 days after receiving notice in accordance with A.3.b above or within 10 days of actual notice.
- E. Imposing a sanction on or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is so convicted, as required by "the Drug-Free Workplace Act".

- F. Assisting employees in selecting a course of action in the event drug counseling treatment and rehabilitation is required and indicating that a trained referral team is in place.
- G. Making a good faith effort to continue to maintain a drug-free workplace through implementation of this Section.

Failure to abide by this certification shall subject the contractor to the penalties provided in the “Drug-Free Workplace Act”.

Contractor further certifies that it has not been debarred and is not ineligible for award of this Contract as the result of a violation of the Illinois Drug Free Workplace Act.

Contractor’s Signature

Date

(Notary Public)

Village of Addison

Prevailing Wage Certification and Acknowledgement

THE UNDERSIGNED CONTRACTOR HEREBY ACKNOWLEDGES, CERTIFIES, AFFIRMS AND AGREES AS FOLLOWS:

All contracts for this Project are subject to the provisions of the Illinois Prevailing Wage Act (820 ILCS 130/0.01 *et seq.*), as amended from time to time, providing for the payment of the prevailing wage rates to all laborers, mechanics, and other workers employed in any public works. Contractor shall pay prevailing wage rates in accordance with the Illinois Department of Labor's wage determination and any subsequent determinations issued by the Illinois Department of Labor, all in accordance with applicable law; for clarity, Contractor shall pay the then-current prevailing wage rates as determined by the Illinois Department of Labor regardless of the prevailing wage rates that applied at the time of the execution of the Contract. These revisions may be accessed at <http://labor.illinois.gov/>.

Contractor is responsible for determining and complying with the applicable prevailing wage rates at the time of RFP submission and at the time of performance of the work. Should Contractor have any questions regarding the applicable prevailing wage rates, Contractor shall inquire and communicate with the Illinois Department of Labor to ensure compliance with the Illinois Prevailing Wage Act. Failure of Contractor to make such determination shall not relieve it of its obligations in accordance with the Contract Documents. Contractor shall also comply with all other requirements of the Act including without limitation those pertaining to inclusion of required language in subcontracts, job site posting, maintenance and submission of certified payroll records and inspection of records.

Contractor acknowledges that it calculated the Contract RFP Price with the knowledge that the Illinois Department of Labor may change the prevailing wage rates at any time and that it must abide by the then-current prevailing wage rates. Therefore, the Contract RFP Price shall not be adjusted for any change to the prevailing wage rates unless such adjustments are approved in writing by the Village of Addison. The Village of Addison agrees that the Contract RFP Price may be renegotiated for any additional work requested that is outside of the initial time term of the Contract, to take into consideration, among other things, any change(s) to the prevailing wage rates.

By signing this Prevailing Wage Certification, Contractor acknowledges and agrees that it has certain obligations pursuant to the Illinois Prevailing Wage Act which it must comply with for the duration of the Contract and any extension.

(Name of Contractor, if Contractor is an Individual)
(Name of Partner, if Partner is a Partnership)
(Name of Officer, if Contractor is a Corporation)

The above statements must be subscribed and sworn to before a notary public.
Subscribed and sworn to

This _____ day of _____, _____.

By _____

(Notary Public)

[See attached Prevailing Wage Rates current as of December 7, 2023]

Illinois Prevailing Wage

This project falls under the Illinois Prevailing Wage Act. The Illinois Prevailing Wage Act requires vendors/contractors/subcontractors to pay laborers, workers, and mechanics performing services on public works projects no less than the “prevailing rate of wages” (hourly cash wages plus fringe benefits) in the county where the work is performed. You must comply with all requirements of the Act to the extent applicable, including but not limited to, all wage, notice, and record keeping duties.

As part of the Prevailing Wage Act, Certified Payroll reports must be submitted directly to the Illinois Department of Labor at the below website.

<https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/CertifiedTranscriptOfPayroll.aspx>

Information pertaining to the Illinois Prevailing Wage Act and the most recent rates may be found at the IDOL website.

<https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/prevailing-wage-rates.aspx>

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						Overtime										
Trade Title	Rg	Type	C	Base	Foreman	M-F	Sa	Su	Hol	H/W	Pension	Vac	Trng	Other Ins	Add OT 1.5x owed	Add OT 2.0x owed
ASBESTOS ABT-GEN	All	ALL		48.90	49.90	1.5	1.5	2.0	2.0	17.37	15.91	0.00	0.91		0.00	0.00
ASBESTOS ABT-MEC	All	BLD		40.59	43.84	1.5	1.5	2.0	2.0	15.22	15.16	0.00	0.88		2.80	5.60
BOILERMAKER	All	BLD		54.71	59.63	2.0	2.0	2.0	2.0	6.97	25.06	0.00	2.83		0.00	0.00
BRICK MASON	All	BLD		50.81	55.89	1.5	1.5	2.0	2.0	12.50	23.01	0.00	1.16	0.00	0.00	0.00
CARPENTER	All	ALL		53.51	55.51	1.5	1.5	2.0	2.0	12.29	25.26	1.70	0.81		0.00	0.00
CEMENT MASON	All	ALL		50.75	52.75	2.0	1.5	2.0	2.0	17.33	22.00	0.00	1.15	0.00	1.50	3.00
CERAMIC TILE FINISHER	All	BLD		45.62	45.62	1.5	1.5	2.0	2.0	12.75	15.64	0.00	1.04	0.00	0.00	0.00
CERAMIC TILE LAYER	All	BLD		53.14	58.14	1.5	1.5	2.0	2.0	12.75	19.41	0.00	1.12	0.00	0.00	0.00
COMMUNICATION TECHNICIAN	All	BLD		37.85	40.65	1.5	1.5	2.0	2.0	13.90	24.30	3.20	0.83	0.00	14.15	28.32
ELECTRIC PWR EQMT OP	All	ALL		49.22	67.16	1.5	1.5	2.0	2.0	7.00	13.79	0.00	1.47	1.48	0.00	0.00
ELECTRIC PWR GRNDMAN	All	ALL		37.81	67.16	1.5	1.5	2.0	2.0	7.00	10.58	0.00	1.14	1.13	0.00	0.00
ELECTRIC PWR LINEMAN	All	ALL		59.17	67.16	1.5	1.5	2.0	2.0	7.00	16.57	0.00	1.77	1.78	0.00	0.00
ELECTRIC PWR TRK DRV	All	ALL		39.19	67.16	1.5	1.5	2.0	2.0	7.00	10.98	0.00	1.17	1.18	0.00	0.00
ELECTRICIAN	All	BLD		45.45	49.70	1.5	1.5	2.0	2.0	13.90	27.89	7.13	1.20	0.00	18.13	36.23
ELEVATOR CONSTRUCTOR	All	BLD		65.12	73.26	2.0	2.0	2.0	2.0	16.08	20.56	5.20	0.70		0.00	0.00
FENCE ERECTOR	NE	ALL		48.48	50.48	1.5	1.5	2.0	2.0	13.68	18.32	0.00	0.75	0.00	0.00	0.00
GLAZIER	All	BLD		49.75	51.25	1.5	2.0	2.0	2.0	15.44	25.36	0.00	2.07	0.00	0.00	0.00
HEAT/FROST INSULATOR	All	BLD		54.12	57.37	1.5	1.5	2.0	2.0	15.22	17.86	0.00	0.88		4.15	8.30
IRON WORKER	All	ALL		57.00	59.00	2.0	2.0	2.0	2.0	17.05	25.56	0.00	0.49		0.00	0.00
LABORER	All	ALL		48.90	49.65	1.5	1.5	2.0	2.0	17.37	15.91	0.00	0.91		0.00	0.00
LATHER	All	ALL		53.51	55.51	1.5	1.5	2.0	2.0	12.29	25.26	1.70	0.81		0.00	0.00
MACHINIST	All	BLD		55.74	59.74	1.5	1.5	2.0	2.0	9.93	8.95	1.85	1.47		0.00	0.00
MARBLE FINISHER	All	ALL		38.75	52.46	1.5	1.5	2.0	2.0	12.50	20.95	0.00	0.66	0.00	0.00	0.00
MARBLE SETTER	All	BLD		49.96	54.96	1.5	1.5	2.0	2.0	12.50	22.31	0.00	0.85	0.00	0.00	0.00
MATERIAL TESTER I	All	ALL		38.90		1.5	1.5	2.0	2.0	17.37	15.91	0.00	0.91		0.00	0.00
MATERIALS TESTER II	All	ALL		43.90		1.5	1.5	2.0	2.0	17.37	15.91	0.00	0.91		0.00	0.00

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MILLWRIGHT	All	ALL		53.51	55.51	1.5	1.5	2.0	2.0	12.29	25.26	1.70	0.81		0.00	0.00
OPERATING ENGINEER	All	BLD	1	56.60	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	BLD	2	55.30	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	BLD	3	52.75	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	BLD	4	51.00	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	BLD	5	60.35	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	BLD	6	57.60	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	BLD	7	59.60	60.60	2.0	2.0	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	FLT		41.00	41.00	1.5	1.5	2.0	2.0	20.90	17.85	2.00	2.15		0.00	0.00
OPERATING ENGINEER	All	HWY	1	54.80	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	HWY	2	54.25	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	HWY	3	52.20	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	HWY	4	50.80	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	HWY	5	49.60	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	HWY	6	57.80	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
OPERATING ENGINEER	All	HWY	7	55.80	58.80	1.5	1.5	2.0	2.0	22.95	20.05	2.00	2.70		0.00	0.00
ORNAMENTAL IRON WORKER	All	ALL		55.01	57.51	2.0	2.0	2.0	2.0	14.23	26.00	0.00	2.00	0.00	0.00	0.00
PAINTER	All	ALL		51.55	53.55	1.5	1.5	1.5	2.0	17.98	7.15	0.00	1.55	0.00	0.00	0.00
PAINTER - SIGNS	All	BLD		41.55	46.67	1.5	1.5	2.0	2.0	3.04	3.90	0.00	0.00	0.00	0.00	0.00
PILEDRIIVER	All	ALL		53.51	55.51	1.5	1.5	2.0	2.0	12.29	25.26	1.70	0.81		0.00	0.00
PIPEFITTER	All	BLD		55.00	58.00	1.5	1.5	2.0	2.0	12.65	22.85	0.00	3.12	0.00	0.00	0.00
PLASTERER	All	BLD		50.85	53.90	1.5	1.5	2.0	2.0	12.50	22.80	0.00	1.12	0.00	0.00	0.00
PLUMBER	All	BLD		56.80	60.20	1.5	1.5	2.0	2.0	17.00	17.29	0.00	1.73		0.00	0.00
ROOFER	All	BLD		49.25	54.25	1.5	1.5	2.0	2.0	11.83	16.14	0.00	1.11	0.00	0.00	0.00
SHEETMETAL WORKER	All	BLD		54.25	56.96	1.5	1.5	2.0	2.0	13.60	19.43	0.00	1.59	2.62	0.00	0.00
SPRINKLER FITTER	All	BLD		56.70	59.45	1.5	1.5	2.0	2.0	14.45	18.70	0.00	0.75	0.00	0.00	0.00
STEEL ERECTOR	All	ALL		57.00	59.00	2.0	2.0	2.0	2.0	17.05	25.56	0.00	0.49	0.00	0.00	0.00
STONE MASON	All	BLD		50.81	55.89	1.5	1.5	2.0	2.0	12.50	23.01	0.00	1.16	0.00	0.00	0.00
TERRAZZO FINISHER	All	BLD		46.94	46.94	1.5	1.5	2.0	2.0	12.75	17.73	0.00	1.07	0.00	0.00	0.00

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TERRAZZO MECHANIC	All	BLD		50.85	54.35	1.5	1.5	2.0	2.0	12.75	19.12	0.00	1.10	0.00	0.00	0.00
TRAFFIC SAFETY WORKER I	All	HWY		40.10	41.70	1.5	1.5	2.0	2.0	10.60	9.35	0.00	1.00	0.00	0.00	0.00
TRAFFIC SAFETY WORKER II	ALL	HWY		41.10	42.70	1.5	1.5	2.0	2.0	10.60	9.35	0.00	1.00	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	1	42.76	43.31	1.5	1.5	2.0	2.0	11.33	14.75	0.00	0.15	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	2	42.91	43.31	1.5	1.5	2.0	2.0	11.33	14.75	0.00	0.15	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	3	43.11	43.31	1.5	1.5	2.0	2.0	11.33	14.75	0.00	0.15	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	4	43.31	43.31	1.5	1.5	2.0	2.0	11.33	14.75	0.00	0.15	0.00	0.00	0.00
TUCK POINTER	All	BLD		50.53	51.53	1.5	1.5	2.0	2.0	9.55	21.72	0.00	1.11	0.00	0.00	0.00

Legend

Rg Region

Type Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers

C Class

Base Base Wage Rate

OT M-F Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

OT Sa Overtime pay required for every hour worked on Saturdays

OT Su Overtime pay required for every hour worked on Sundays

OT Hol Overtime pay required for every hour worked on Holidays

H/W Health/Welfare benefit

Vac Vacation

Trng Training

Other Ins Employer hourly cost for any other type(s) of insurance provided for benefit of worker.

Explanations DUPAGE COUNTY

IRON WORKERS AND FENCE ERECTOR (WEST) - West of Route 53.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold

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and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

TRAFFIC SAFETY Worker I

Traffic Safety Worker I - work associated with the delivery, installation, pick-up and servicing of safety devices during periods of roadway construction, including such work as set-up and maintenance of barricades, barrier wall reflectors, drums, cones, delineators, signs, crash attenuators, glare screen and other such items, and the layout and application or removal of conflicting and/or temporary roadway markings utilized to control traffic in construction zones, as well as flagging for these operations.

TRAFFIC SAFETY WORKER II

Work associated with the installation and removal of permanent pavement markings and/or pavement markers including both installations performed by hand and installations performed by truck.

CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS TECHNICIAN

Low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

MARBLE FINISHER

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Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to

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exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types: Creter Crane: Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two

DuPage County Prevailing Wage Rates posted on 12/7/2023

Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

OPERATING ENGINEER - FLOATING

Diver. Diver Wet Tender, Diver Tender, ROV Pilot, ROV Tender

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

TERRAZZO FINISHER

DuPage County Prevailing Wage Rates posted on 12/7/2023

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".

DuPage County Prevailing Wage Rates posted on 12/7/2023

Pay Period



1. Pay Period



2. Contractor



3. Public Body



4. Employee



5. Review

Pay Period

Payroll Start Date*

Payroll End Date*

Contract Number*

Project Number*

Project Address*

Project City*

Project State*



Project Zip Code*

Save & Continue

Contractor and/or Subcontractor



1. Pay Period



2. Contractor



3. Public Body



4. Employee



5. Review

Contractor and/or Subcontractor

Company Name*

Contact First Name*

Contact Middle Name

Contact Last Name*

Postal Address*

City*

State*



Zip*

Primary Phone*

Secondary Phone

Primary Email*

Secondary Email

Previous

Save & Continue

Public Body Information



1. Pay Period



2. Contractor



3. Public Body



4. Employee



5. Review

Public Body Information

Public Body Name*

Contact First Name

Contact Middle Name

Contact Last Name

Postal Address*

City*

State*



Zip*

Primary Phone

Secondary Phone

Previous

Save & Continue

Employee Details

Employee Details

First Name*

First Name

Middle Name

Middle Name

Last Name*

Last Name

Postal Address*

Postal Address

City*

City

State*

-- Select a state --

Zip*

Zip

Primary Phone*

Phone Number

Last 4SSN*

Last 4SSN

Work Classification*

Work Classification

Gender*

-- Select a Gender --

Ethnicity*

-- Select Ethnicity --

Race*

-- Select Race --

Is Veteran*

Yes No

Work Classification

Hours worked each day								Total Straight Time Hours	Total OT Hours	Hourl
Hours Worked	SUN	MON	TUE	WED	THR	FRI	SAT			
Prevailing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Non Prevailing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

<

Hourly Fringe Benefit :

>

Pension Retirement

Pension Retirement

Health Insurance Welfare

Health Insurance Welfare

Vacation

Vacation

Training

Training

Save

Employees

	Name	Last 4 SSN	Work Classification	Delete
No Employees have been entered.				

Previous

Save & Continue

Review

Review

Pay Period

Pay Period

4/1/2020 to 4/12/2020

Contract Number

A12345678

Project Number

P123456

ProjectAddress

1673 SEVEN PINES RD
SPRINGFIELD, IL 62704

Contractor or Subcontractor

Company Name

All Steel Ironworks, Inc. and AllSteel Iron, Inc

Contact First Name

Jason na Keller

Primary Phone

2174567888

Postal Address

1807 SEVEN PINES RD
SPRINGFIELD, IL 62704

Public Body Information

Public Body Name

SCchool

Contact First Name

Primary Phone

PostalAddress

1807 SEVEN PINES RD
SPRINGFIELD, IL 62704

Employee

Report hours for each day, including overtime hours, list hourly prevailing wage rate and hourly fringe benefits allotments

<div><div>Employee Name</div><div>Naveen Adabala</div><div><div>Last 4SSN</div><div>1111</div></div><div><div>Primary Phone</div><div>2174567890</div></div><div><div>Work Classification</div><div>Associate</div></div><div><div>Postal Address</div><div>1807 SEVEN PINES RD SPRINGFIELD, IL 62704</div></div></div>	Hours worked each day								Total Straight Time Hours	Total OT Hours	Hourly Wage Rate	OT Wage Rate	Per Pay Period	
	Hours Worked	SUN	MON	TUE	WED	THR	FRI	SAT					GROSS	NET
	Prevailing	0.00	0.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	\$8.00	\$8.00	\$0.00	\$0.00
	Non Prevailing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Pension Retirement \$0.00													
	Health Insurance Welfare \$0.00													
Vacation \$0.00														
Training \$0.00														

I, do hereby state: that I pay or supervise the payment of the persons employed on the public works project that during the payroll period commencing between mentioned above , all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said from the fully weekly wages earned by any person, and that no deductions have been made either directly or indirectly from the full weekly wages earned by any persons, other than permissible deductions as defined by Federal and/or State Law. I further certify that this payroll is correct and complete; that the wage rates herein stated and that the classification set forth for each laborers, workers, or mechanic conform to the work he/she performed

Certified By

☐ Do agree with certification*

First and Last Name

Previous

Certify

Confirmation Page



Confirmation

THANK YOU for the submission of your payroll. Please read the following message carefully

Certified Transaction of payroll has been submitted. The case number for this submission is 20-CTP-000001

Sample Email

Dear Contractor,

The Illinois Department of Labor (IDOL) has received "Certified Transcript of Payroll" that you filed on-line on Date 4/21/2020 3:24:49 PM, Your Case Number is **20-CTP-000001**.

Sincerely,

Certified Transcript of Payroll Act Section
Conciliation and Mediation Division
Illinois Department of Labor

**EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS ACT
CERTIFICATION**

_____,
being

first and duly sworn, deposes and says:

That he/she is _____ of

(Partner, Officer, Owner, etc.)

(Contractor)

The undersigned hereby agrees that, to the extent required by the Employment of Illinois Workers on Public Works Act (30 ILCS 570/1 et seq.), as now existing or hereafter amended, the undersigned shall comply with the Illinois labor employment requirements as set forth in the Act.

(Name of Contractor, if Contractor is an Individual)
(Name of Partner, if Partner is a Partnership)
(Name of Officer, if Contractor is a Corporation)

The above statements must be subscribed and sworn to before a notary public.
Subscribed and sworn to

This _____ day of _____, _____.

By _____

(Notary Public)

**VILLAGE OF ADDISON
CONTRACTOR AND SUBCONTRACTOR
SUBSTANCE ABUSE PREVENTION POLICY**

Pursuant to the “Substance Abuse Prevention on Public Works Projects Act” (820 ILCS 265/1 *et seq.*), employees of the Contractor and employees of any Subcontractor are prohibited from the use of drugs or alcohol, as defined in the Act, while performing work on any public works project.

Before the Contractor or Subcontractor commences work, the Contractor and any Subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in the Act or shall have a collective bargaining agreement in effect dealing with the subject matter of the Act.

The Contractor and any Subcontractor shall file with the Village: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act or a letter certifying that the Contractor or Subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act. A certification form is attached and must be completed by the Contractor and each Subcontractor to this Contract.

VILLAGE OF ADDISON

Re: Substance Abuse Prevention Program

Pursuant to 820 ILCS 265/1 *et seq.*, the undersigned hereby certifies that it is in compliance with the terms and provisions of the Substance Abuse Prevention on Public Works Projects Act. In particular, the undersigned hereby represents and warrants to the Village of Addison as follows:

[Complete either A or B below]

- A. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has one or more collective bargaining agreements in effect for all of its employees that deal with the subject matter of the Substance Abuse Prevention on Public Works Act, 820 ILCS 265/1 *et seq.*

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Date: _____

Signature of Authorized Representative

- B. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has in place for all of its employees not covered by a collective bargaining agreement that deals with the subject of the Act, a written substance abuse prevention program, a true and correct copy of which is attached to this certification, which meets or exceeds the requirements of the Substance Abuse Prevention on Public Works Act, 820 ILCS 265/1 *et seq.*

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Date: _____

Signature of Authorized Representative