

City of Dover

January 22, 2025

To Whom It May Concern:

The City of Dover will receive sealed proposals on March 12, 2025, at 2:00 PM local time for the purpose of contracting for **SCADA EQUIPMENT UPGRADE, RFP NUMBER 25-0018WW**. The proposal must be submitted with three (3) paper copies and one (1) electronic copy on either a CD/DVD or flash drive in a sealed envelope to: City of Dover Procurement Office, 710 William Street, Dover, DE 19904. **All vendors must complete the request for proposal (RFP) notice and send it via email to doverwhse@dover.de.us or by fax to (302) 736-7178 if they intend to submit a proposal. Any vendor not returning the form may not receive published addenda.**

A mandatory pre-proposal meeting will be held on February 5, 2025, at 1:00 P.M. The meeting will be at the JW Pitts Center located at 10 Electric Avenue, Dover, DE 19904.

Your submission is not revocable for ninety (90) days following the response deadline indicated above.

LATE SUBMISSIONS:

A proposal received after the closing date and time for receipt of the proposals is late and shall not be considered. It is the responsibility of the submitter to ensure that the proposal is received prior to the closing date and time.

QUESTIONS:

If you have questions concerning this Request for Proposal, they must be made in writing and emailed to me at doverwhse@dover.de.us. **All questions must be submitted no later than February 19, 2025.** All questions will be compiled and answered in the form of an addendum and will be emailed to all prospective proposers who return the attached RFP notice and will be posted on the City of Dover web site, <https://www.cityofdover.com/bid-procurement>. All changes or corrections to this Request for Proposal will be handled by addenda issued by the Purchasing Office. The receipt of all addenda must be acknowledged in the proposal submission.

The City of Dover reserves the right to request corrections, clarifications, and/or additional information pertaining to the proposer's response.

Proposals will be opened publicly at the time and place designated in this letter. All proposals will be opened in the presence of the Procurement Manager or his/her designee. All other information contained in the proposals shall be considered confidential to avoid disclosure of contents prejudicial to competing offerors during the process of negotiation. The main purpose of the RFP opening is to reveal the name(s) of the proposer(s), not to serve as a forum for determining the award.

The contract shall be awarded within 90 days of the closing date to the offeror whose proposal is determined in writing to be most advantageous to the City. All prices must be held firm for a minimum of 90 days from the date of the opening. The proposals and summaries shall not be open for public inspection until after receipt of a fully executed contract.

Public employees and elected officials must discharge their duties impartially so as to assure competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of City procurement. Dover Code Article II Section 30 (Appendix A of this policy), establishes standards of ethical conduct among public officials and employees. Vendors participating in the City procurement will be disqualified from the procurement if the employee, official or vendor is found to be in violation of the City's ethical standards and a referral of the matter will be presented to the Ethics Commission.

Please reference the City of Dover Purchasing Policy if you have any questions at:

<https://www.cityofdover.com/media/Purchasing/Policy/Purchasing%20Policy%20Final%2005-23-2022.pdf>.

The City of Dover reserves the right to waive technicalities, to reject any or all submissions, or any portion thereof, to advertise for new proposals, to proceed to do the work otherwise, or to abandon the work, if in the best interest of the City.

All vendors must completely fill out, sign, date, and return the attached "Consent for Disclosure Under the Freedom of Information Act (FOIA)" form with their submission. Failure to return the completed form will be deemed consent to the disclosure of all information included in the submission after the receipt of a signed contract or issuance of a purchase order. **Any and all proprietary information contained within the proposal must be isolated and clearly marked.** The cover must indicate that the proposal contains such information.

Minority, women, veteran, service-disabled veteran, and individuals with disabilities owned vendor preference shall be three percent (3%) of the value of the award. **The vendor must identify qualification and claim to the preference on the submitted proposal documents. The vendor must provide authoritative proof of minority ownership such as identification in the certification directory maintained by the State of Delaware Office of Supplier Diversity to qualify for this preference.** This preference is to be considered as a stand-alone and cannot be

added to any other preference that may be allowed. This preference shall not apply to subcontractors.

Local vendor preference shall be considered for materials, equipment, construction contracts, and utility contracts. Local vendor preference shall be three percent (3%) of the annual value of the award. The term local vendor is defined as a gradually increasing range with preference assigned as follows:

Rule 1: Vendor located within the city limits of the City of Dover.

Rule 2: Vendor located within Kent County, Delaware (applicable only if no vendor qualifies under rule 1)

Rule 3: Vendor located within the State of Delaware (applicable only if no vendor qualifies under rules 1 & 2)

In the event that no vendor qualifies under rules 1, 2, or 3, no local vendor preference will be awarded. **The vendor must identify qualification and claim to the preference on the submitted proposal documents.** This preference is to be considered as stand-alone and cannot be added to any other preference that may be allowed.

A performance bond shall be required from the successful proposer for a construction contract. Such a bond shall be for the full amount of the contract. If the contractor fails to provide such a bond or a binder within fifteen days of the award of the contract, the award of the contract or the contract shall be void. The bond shall be released by the City of Dover upon successful completion of the contract and upon a detailed inspection of the contracted work.

In the event the contractor does not fulfill its obligations under the terms and conditions of this contract, the City of Dover may contract for an equivalent product on the open market. Any difference in cost between the contract prices herein and the price of open market product shall be the responsibility of the contractor. Under no circumstances shall monies be due the contractor in the event open market products can be obtained below contract cost. Any monies charged to the contractor may be deducted from an open invoice.

Neither the contractor nor the City of Dover shall be held liable for non-performance under the terms and conditions of this contract due but not limited to, government restriction, strike, flood, fire, or unforeseen catastrophe beyond either party's control. Each party shall notify the other in writing of any situation that may prevent performance under the terms and conditions of this contract.

Vendors must provide references to the City of Dover upon request. Vendor references may be checked to verify the proposer's ability to perform the contract requirements, the quality of work, and the ability to meet obligations.

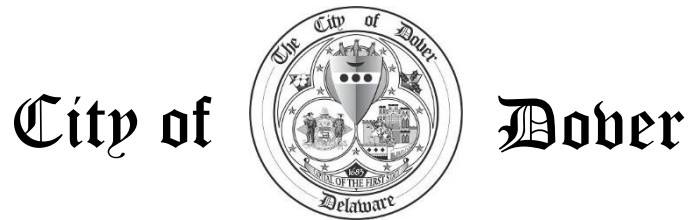
ENVELOPES MUST BE MARKED " SCADA EQUIPMENT UPGRADE, RFP NUMBER 25-0018WW."

No faxed or emailed proposals will be accepted.

The City of Dover shall have the right to reject any or all proposals if deemed to be in the best interest of the City, such as but not limited to local vendor preference and minority vendor preference while awarding.

Sincerely,

Barry Wolfgang
Contract and Procurement Manager
City of Dover
(302) 736-7795



REQUEST FOR PROPOSAL NOTICE

RFP Number: 25-0018WW RFP Opening: March 12, 2025 at 2:00 P.M.

Description: SCADA Equipment Upgrade

If you are interested in the Request for Proposal described above, you can download it in Adobe PDF format from our web site <http://www.cityofdover.com/bid-procurement>. Any amendments or other additional information related to this solicitation will be posted with the original document on the web site.

If you do not have internet access and want to receive this Request for Proposal, all subsequent amendments, or additional information on the RFP package, please provide the requested information to:

The City of Dover
 Purchasing Office
 710 William Street
 Dover, DE 19904
 Fax: (302) 736-7178, attention Procurement Manager
 E-mail: doverwhse@dover.de.us

Please complete the following and return this form to the City of Dover Purchasing Office.

Company: _____	Vendor Response /Request
Address _____ _____	No submission at this time, please retain on vendor list
Contact: _____	Please send complete RFP package
Phone _____	I will download the RFP package
Email _____	I intend to submit
	I do not intend to submit



**CONSENT FOR DISCLOSURE UNDER
THE FREEDOM OF INFORMATION ACT (FOIA)**

REQUESTS FOR PROPOSAL AND INVITATIONS TO BID

From time to time, the City of Dover receives requests under the Freedom of Information Act (FOIA) for information submitted in response to Requests for Proposals and Invitations to Bid. This information shall be provided to those who request it under FOIA; however, in accordance with 29 **Del. C.** §10002(1)(2), trade secrets and commercial or financial information obtained from a person which is of a privileged or confidential nature are not deemed public records.

Please indicate your preference regarding the disclosure, under FOIA, of the information that you are submitting by checking the appropriate box and providing the information below. Please note that prior to issue of a purchase order or full execution of a contract, only the names of vendor(s) and bid tabulations will be released for Invitations to Bid, and only the names of vendor(s) and information deemed necessary for City Council to make an informed decision on award approval will be released for Requests for Proposals.

- I consent to the disclosure of all information included in this submission.
- This submission includes trade secrets and commercial or financial information which is of a privileged or confidential nature that is exempt from disclosure under 29 **Del. C.** §10002(1)(2). In accordance with 29 **Del. C.** §6923(j)(4) and §6924(j)(3), I have isolated and identified in writing the confidential portions of the submitted proposal/bid and attached a statement that explains and supports my claim that the proposal/bid items identified as confidential contain trade secrets or other proprietary data and I am prepared to defend against disclosure. I understand that any items not so identified are subject to disclosure.

Name: _____

Signature: _____ Date: _____

Title/Position: _____

Company Name: _____

Email Address: _____ Telephone: _____

Mailing Address: _____

RFP/Bid No. _____

For additional information, please contact: City of Dover - City Clerk's Office
P.O. Box 475
Dover, DE 19903
cityclerk@dover.de.us
Phone (302) 736-7008; FAX: (302) 736-5068

Please note that this form is a public record and will be provided to those who request information regarding Requests for Proposals and Invitations to Bid under FOIA.

CITY OF DOVER, DELAWARE

PROJECT MANUAL

FOR

SCADA EQUIPMENT UPGRADE

PROPOSAL NUMBER
25-0018WW



January 2025

Issued By:

**City of Dover
Procurement Office
710 William Street
Dover, Delaware 19904
(302) 736-7795
Fax (302) 736-7178**

Prepared By:

**City of Dover
Department of Water & Wastewater
5 E Reed St
Dover, DE 19901
302-736-7025**

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ADVERTISEMENT FOR PROPOSAL

Sealed proposals will be received on behalf of the City of Dover, (herein called the “Owner”) at the City of Dover, City of Dover Procurement Office, 710 William Street, Dover, DE 19904 no later than 2:00 p.m. EST on Wednesday March 12, 2025. Proposals will then be publicly opened and read aloud immediately thereafter for the following:

SCADA Equipment Upgrade

Proposal No.: 25-0018WW

Contract Duration: 450 Days

This work is detailed in the **SCADA Equipment Upgrade Request for Proposal, Proposal No.: 25-0018WW**. The work is a design-build for the City of Dover’s Water Production Division Supervisory Control and Data Acquisition (SCADA) system. This work includes coordination with City of Dover staff, design, installation, testing, startup and commissioning, and training.

Each PROPOSAL must be accompanied by a BID BOND payable to the Owner for ten (10) percent of the total amount of the PROPOSAL. No Proposer may withdraw their bid within ninety (90) days after the actual date of the opening thereof.

The right is reserved, as the interests of the City of Dover may appear, to reject any and all proposals, to waive any information in proposals received, and to accept or reject any items of any proposal.

There will be a **Mandatory Pre-Proposal Meeting** at the John W. Pitts Center, 10 Electric Avenue, Dover, DE on Wednesday February 05, 2025 at 1:00 p.m. The nearest intersection is Electric Avenue and North Street. Proposers must allow themselves sufficient time to be present prior to the start of the pre-proposal meeting. Traffic and weather will not be considered a justifiable reason to be late. All prospective proposers are encouraged to acquire and review the specifications prior to attending the meeting. Copies of the specifications will be available on the City of Dover website, www.cityofdover.com.

City of Dover, Delaware

By Barry Wolfgang

Contract and Procurement Manager

END OF SECTION

SECTION 00 11 19
REQUEST FOR PROPOSAL

PROPOSAL NUMBER: 25-0018WW

NAME OF SOLICITING GOVERNMENT

City of Dover, Delaware
City Hall – The Plaza
P.O. Box 475
Dover, Delaware 19903-0475

1.0 DEFINED TERMS

- 1.01 Terms used in this Request for Proposal which are defined in the Standard General Conditions of the Contract Between Owner and Design/Builder, EJCDC Document D-700 (2009 Edition), have the meanings assigned to them therein. Certain additional terms used in this Request for Proposals have the meanings indicated below.
- A. Proposal Documents – The Advertisement or Invitation, Request for Proposal, Proposal Form, and the proposed Contract Documents (including all Addenda issued prior to acceptance of Proposals).
 - B. Proposer – One who submits a Proposal directly to Owner.
 - C. Successful Proposer – The Proposer to whom Owner (on the basis of Owner’s evaluation as hereinafter provided) makes an award.
 - D. Technical Exhibits – Documents prepared by Design/Builder which demonstrate the Proposer’s plan for meeting the Owner’s requirements as set forth in the Conceptual Documents.

2.0 COPIES OF PROPOSAL DOCUMENTS

2.01 Obtaining and Use of Proposal Documents

- A. Complete sets of the Proposal Documents may be obtained from the Owner at the City of Dover website, posted under Bid Procurement at www.cityofdover.com/bid-procurement.
- B. The existing inventory of the SCADA system will be provided on a request to the City of Dover by the perspective Proposer. Contact 302-736-7025 to obtain a copy.

- C. Complete sets of Proposal Documents must be used in preparing Proposals. Neither Owner nor Owner's Consultant (if any) assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Proposal Documents.
- D. Copies of Proposal Documents available on the above terms are only for the purpose of obtaining Proposals for the Work and do not confer a license or grant to Proposers for any other use.

3.0 QUALIFICATIONS OF PROPOSERS

3.01 Proposer's Qualifications

- A. All contractors submitting proposals shall include the following: a current financial statement, an acceptable experience record, and any other documents deemed necessary by the City of Dover (City). **Below is a detailed list of the items that must be submitted to the City on the date of the proposal opening.**
 - 1. Business name and contact person, together with the address, telephone number, facsimile number, and email address of the office from which the service will be provided.
 - 2. Proof of insurance, complying with the **Instructions** Section, including the following documentation:
 - Certificate of Insurance
 - Declaration Page
 - Insurance policy documents (upon receipt of Contract)
 - 3. A financial statement prepared by an independent certified public accountant or an independent public accountant holding a valid permit issued by an appropriate State licensing agency and shall have been so prepared as to reflect the financial status of the submitting company. This statement must be current and not more than one (1) year old. In the case that the proposal date falls within the time that a new statement is being prepared, the previous statement shall be updated by proper verification.
 - 4. Identify the personnel who will manage and supervise this project, as well as the staff responsible for jobsite safety, quality control, and other specialties. Provide each person's title and project-specific responsibilities, and resume. Lack of detailed information on the resumes may result in a less favorable evaluation. Provide an organization chart diagram, if necessary, to clearly explain the lines of authority, duties, and responsibilities.
 - 5. The proposer must demonstrate their ability to meet the levels of technical expertise, experience, and resources required to deliver a complete and functioning SCADA system to the City.

6. The proposer must demonstrate substantial experience as a developer, supplier and integrator of SCADA systems similar in size, nature, and complexity of the City's existing SCADA system.
7. The proposer shall provide documentation showing satisfactory performance as the prime contractor (General Contractor) responsible for the complete construction of five (5) **similar** projects within the past five (5) years.
 - Preference for projects in the water/wastewater industry.
 - Include description of project.
8. Documentation that the business is licensed insured and authorized to work in the City of Dover and the State of Delaware.
9. A minimum of three (3) references must be provided. Government references preferred. For each reference listed, the information provided should consist of the following:

(1) Name and mailing address of the owner/business

(2) Name and telephone number of your contact person within the said business

Provide a list of references the City may contact in order to assist in the evaluation of your past performance. Please limit these references to owners of projects that involved the installation of SCADA systems.

10. The City's plan is to complete the proposed work in 450 calendar days from the Notice to Proceed. Provide documentation stating that your business has the available equipment, personnel and ability to meet the proposed schedule.
11. Provide documentation that shows that your business has a current safety plan and or policy in place and conducts periodic safety training.
12. Provide information detailing how your proposal can assist the City of Dover meet or exceed the cyber security considerations listed in Appendix A.
13. Information on the nature and magnitude of any litigation or proceeding whereby, during the past three (3) years, a court or any administrative agency has ruled against the proposer in any matter related to the professional activities of the proposer. Similar information shall be provided for any current or pending litigation or proceeding.
14. A statement to the effect that the selection of the proposer shall not result in a conflict of interest with any other party which may be affected by the work to be undertaken. Should any potential or existing conflict be known by a proposer, said proposer must specify the party with which the conflict exists or might arise, the nature of the conflict, and whether or not the proposer would

step aside or resign from the engagement or representation creating the conflict. (The City reserves the right to select more than one firm to perform the required services to avoid conflict of interest and other similar occurrences).

15. Any additional information that you feel will be beneficial to the City in evaluating your qualifications to perform the proposed scope of work.

4.0 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

4.01 Proposer's Responsibilities

- A. It is the responsibility of each Proposer before submitting a Proposal to:
1. Examine and carefully study the Proposal Documents and other related data identified in the Proposal Documents;
 2. Visit the Site to become familiar with and satisfy Proposer as to the general, local and Site conditions that may affect cost, progress, performance or furnishing of the Work. Schedule a site visit by contacting Kate Mills at 302.736.7025;
 3. Become familiar with and satisfy Proposer as to all federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work;
 4. Study and carefully correlate Proposer's knowledge and observations with the Contract Documents and such other related data; and
 5. Promptly notify Owner of all conflicts, errors, ambiguities, or discrepancies which Proposer has discovered in the Proposal Documents.

4.02 Site Conditions

- A. Before submitting a Proposal each Proposer will be responsible to obtain such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and underground facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Proposer and safety precautions and programs incident thereto or which Proposer deems necessary to prepare its Proposal for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

The City of Dover has fifteen (15) deep wells and seven (7) water storage tanks. The master SCADA is located at our water treatment plant.

4.03 Proposer's Access to the Site

- A. On request, Owner will provide each Proposer access to the Site to conduct such examinations, investigations, explorations, tests and studies as each Proposer deems necessary for submission of a Proposal. Proposer must clean up and restore the Site to its former conditions upon completion of such explorations, investigations, tests and studies. Contact Kate Mills at 302.736.7025 to schedule a site visit.

4.04 Work at the Site by Others

- A. No work is anticipated to be performed at the Site by Owner or others (such as utilities) that relates to the Work for which a Proposal is to be submitted.

5.0 PRE-PROPOSAL MEETING

- 5.01 A **Mandatory** Pre-Proposal Meeting will be held at 1:00 p.m. on February 05, 2025 at John W. Pitts Center, 10 Electric Avenue, Dover, DE 19904. The Owner will be present to discuss the Project. Owner will transmit to all prospective Proposers such Addenda as Owner considers necessary in response to questions arising at the meeting and received by the Questions deadline. Oral statements may not be relied upon and will not be binding or legally effective.

6.0 SITE AND OTHER AREAS

- 6.01 The Site is identified in the Proposal Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Design/Builder.

7.0 INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Proposal Documents are to be directed to Owner in writing. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Owner as having received the Proposal Documents. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Proposal Documents as deemed advisable by Owner.

8.0 PROPOSAL SECURITY

- 8.01 Each Proposal must be accompanied by Proposal security made payable to Owner in an amount of ten (10) percent of Proposer's maximum Proposal price and in the form of a certified or cashier's check or a Surety Bond on form attached issued by a surety meeting the requirements of paragraphs 5.01 and 5.02 of the General Conditions.

9.0 CONTRACT TIMES

9.01 The times for Substantial Completion and readiness for final payment are to be set forth by Proposer in the Proposal. The times will be taken into consideration by Owner during the evaluation of Proposals, and it will be necessary for the apparent Successful Proposer to satisfy Owner that it will be able to achieve Substantial Completion and be ready for final payment within the times designated in the Proposal. Substantial Completion is desired before July 31, 2026.

10.0 LIQUIDATED DAMAGES

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

11.0 PREPARATION OF PROPOSAL

11.01 The Proposal Form is included with the Proposal Documents. Additional copies may be obtained from Owner.

11.02 All blanks on the Proposal Form must be completed by printing in black ink or typed and the Proposal signed. A Proposal price shall be indicated for each Proposal item.

11.03 Proposal Signatures

A. A Proposal by a corporation must be executed in the corporate name by a corporate officer accompanied by evidence of authority to sign. The corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

B. A Proposal by partnerships shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.

C. A Proposal by a Limited Liability Company shall be executed in the name of the firm by a member accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature.

D. A Proposal by an individual shall show the Proposer's name and official address.

E. A Proposal by a joint venture shall be executed by each joint venturer in the manner indicated on the Proposal Form. The official address of the joint venture shall be shown below the signatures.

11.04 All names must be typed or printed in black ink below the signature.

11.05 The Proposal shall contain an acknowledgement of receipt of all Addenda, the numbers of which must be filled in on the Proposal Form.

- 11.06 The address and telephone number for communications regarding the Proposal must be shown.
- 11.07 The proposal shall contain evidence of proposer’s authority to do business in the state where the project is located or covenant to obtain such qualification prior to award of the contract. Proposer’s state contractor license number for the state of the project and professional engineering registration numbers must also be shown if required.

12.0 PROPOSAL PRICE

12.01 Lump Sum

- A. Proposers shall submit a Proposal on a lump sum basis as set forth in the Proposal Form.
 - 1. Cost should include any proposed software licensing and warranty on software and hardware for twenty-four (24) months.
- B. Option #1: Includes the pricing for the City of Dover’s option to retain the technical services of the awarded Proposer for 24-7 support for the proposed SCADA system. This cost will be used by the city to further evaluate the cost-effectiveness of the Proposer’s services and shall not be included in the Lump Sum. To include:
 - 1. Estimated annual SCADA software and hardware technical support beyond the initial installation, commissioning and first twenty-four (24) months.
 - 2. Any proposed software license fee above and beyond the first twenty-four (24) months.
 - 3. Any software and service costs to perform upgrades, if applicable.

12.02 The Proposal price shall include such amounts as the Proposer deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in paragraph 10.02 of the General Conditions.

13.0 SUBMITTAL OF PROPOSALS

13.01 The Proposal Form is to be completed and submitted in triplicate with the Proposal security and one (1) electronic copy. The Proposal Documents should include following data:

- A. Statement of Acknowledgement of Addenda
- B. Statement of Qualifications, including all the documents listed in Section 3.01
- C. Identification of Design Professionals and Subcontractors
- D. List of key personnel and a description of their project roles and responsibilities.
- E. Proposed technical approach and understanding of the project.
- F. General concept of SCADA system proposed to meet the city’s requirements.
- G. Five project abstracts for similar projects.
- H. List of three references.

13.02 Proposals shall be submitted no later than the following time and at the following place:

City of Dover, Central Services Department, Procurement Office, 710 William Street,

Dover, DE, 2:00 P.M. on March 12, 2025.

13.03 Proposals shall be enclosed in an opaque sealed envelope or box, marked with the Project title (and, if applicable, the designated portion of the Project for which the Proposal is submitted) and name and address of Proposer and accompanied by the Proposal security and other required documents. If the Proposal is sent through the mail or other delivery system, the sealed envelope or box shall be enclosed in a separate envelope or box with the notation "PROPOSAL ENCLOSED" on the face of it. Such Proposals shall be addressed to:

Barry Wolfgang
Contract and Procurement Manager
City of Dover
710 William Street
Dover, Delaware 19904

14.0 MODIFICATION AND WITHDRAWAL OF PROPOSAL

14.01 A Proposal may be modified or withdrawn by an appropriate document duly executed in the manner that a Proposal must be executed and delivered to the place where the Proposals are to be submitted prior to the date and time for the opening of the Proposals.

14.02 If within 24 hours after Proposals are opened any Proposer files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Proposal, that Proposer may withdraw its Proposal, and the Proposal security will be returned. Thereafter, if the Work is readvertised, that Proposer will be disqualified from further consideration of being awarded the Contract.

15.0 OPENING OF PROPOSALS

15.01 Proposals will be opened publicly at the time and place where Proposals are to be submitted. An abstract of the amounts of the base Proposals will be made available to Proposers after the opening of Proposals.

16.0 PROPOSALS TO REMAIN SUBJECT TO ACCEPTANCE

16.01 All Proposals will remain subject to acceptance for the period of time stated in the Proposal Form, but Owner may, in its sole discretion, release any Proposal and return the Proposal security prior to the end of that period.

17.0 SELECTION CRITERIA

17.01 In evaluating Proposals, Owner will consider the following items:

- A. Whether the Proposals comply with the prescribed documents and other data as may be requested in the Proposal Form or prior to the Notice of Award.
- B. The Proposal prices as required in the Proposal Form.
- C. The extent to which the Proposer technical approach demonstrate the Proposer’s plan for meeting of the Owner’s requirements set forth in the Contract Documents.
- D. The qualifications of Proposers and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals and entities proposed for those portions of the Work.
- E. These criteria will be evaluated in the following manner by the City of Dover Dept. of Water & Wastewater and Information Technology Dept. personnel:

	Factor	Point Range
A	Experience: Demonstrated experience with similar projects and history of achieving highest and best results among its peers.	0 to 15
B	Project Management: Project organization and management, including staffing, management control and sub-contractor utilization	0 to 15
C	Staff: Qualifications and utilization of the firm's employees assigned to the provision of these services, including previous work experience, technical management experience, education and training. In addition to project specific experience, the City will take into account any consultant experience in providing general municipal SCADA technical assistance (to other various government agencies).	0 to 15
D	Costs: Lump sum of service, including any and all permit costs.	0 to 30
E	Service Ability: Firm’s ability to provide full spectrum of design and integration services including personnel, managerial and other resources as and when required to meet the project’s objectives. Includes how the firm’s proposal can assist the City in meeting or exceeding the considerations in Appendix A.	0 to 15
F	Location: Geographical location in relation to the City of Dover	0 to 10
	Maximum Points	100

17.02 Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Proposal and to establish the responsibility, qualifications and financial

ability of Proposers, Subcontractors, Suppliers, and other individuals and entities to perform and furnish the Work in accordance with the Contract Documents.

18.0 REJECTION OF ALL PROPOSALS AND DISCREPANCIES; AWARD OF CONTRACT

18.01 Rejection of All Proposals, Discrepancies

- A. Owner reserves the right to reject any or all Proposals, including without limitation nonconforming, non-responsive, unbalanced, or conditional Proposals. Owner further reserves the right to reject the Proposal of any Proposer whom it finds, after reasonable inquiry and evaluation, to be non-responsible. Owner may also reject the Proposal of any Proposer if Owner believes that it would not be in the best interest of the Project to make an award to that Proposer. Owner also reserves the right to waive all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Proposer.
- B. More than one (1) Proposal for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any proposer has an interest in more than one (1) Proposal for the Work may be cause for disqualification of that Proposer and the rejection of all Proposals in which that Proposer has an interest.
- C. If the Contract is awarded, Owner will award the Contract to the Proposer whose Proposal is in the best interests of the Project.

18.02 Award of Contract

- A. If the contract is to be awarded, Owner will give Successful Proposer a Notice of Award within 90 days after the day of the Proposal opening.

19.0 CONTRACT SECURITY

- 19.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions sets forth Design/Builder's requirements as to performance and payment Bonds and insurance. When the Successful Proposer delivers the executed Agreement to Owner, it must be accompanied by the required Bonds.

20.0 SIGNING OF AGREEMENT

- 20.01 When Owner gives a Notice of Award to the Successful Proposer, it will be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Proposer shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within 15 days thereafter, Owner shall deliver one (1) fully signed counterpart to Successful Proposer.

21.0 PROPOSAL COMPENSATION

21.01 No Proposal compensation will be paid to unsuccessful Proposers submitting Proposals.

END OF SECTION

SECTION 00 21 00

INSTRUCTIONS

I. PROPOSAL SUBMISSION

- A. All proposals should be delivered to:
- Barry Wolfgang
Contract and Procurement Manager
City of Dover Central Services Department
710 William Street
Dover, Delaware 19904
- B. Questions regarding scope of services or proposal process:
1. To ensure fair consideration for all proposers, communication to or with any department or departmental staff during the submission process, will be prohibited except as provided in the third paragraph below. Any communication between proposer and the City will be initiated by the appropriate staff member in order to obtain information or clarification needed to develop a proper, accurate evaluation of the proposal. Such communications initiated by a proposer may be grounds for disqualifying the offending proposer from consideration for award of the contract and/or any future proposal.
 2. Any questions relative to interpretation of the scope of services or the proposal process, shall be addressed as indicated below, in ample time before the period set for the receipt and opening of proposals.
 3. Questions or comments should be directed in writing to:
Barry Wolfgang
Contract and Procurement Manager
City of Dover Central Services Department
710 William Street
Dover, Delaware 19904
E-mail address: Doverwhse@dover.de.us
- C. In order to be acceptable, three (3) hard copies and one (1) electronic copy of the proposal must be submitted in a sealed envelope on the outside of which shall be plainly marked "Sealed Proposal: SCADA Equipment Upgrade RFP Opening December 04, 2024 2:00 P.M. Proposal No.: 25-0018WW", together with the name and address of the company submitting the proposal. Proposals will be received until 2:00 P.M., or hand delivered no later than 2:00 P.M. on Wednesday March 12, 2025, at which time they will be publicly opened in the City of Dover Department of Central Services, 710 William Street, Dover, Delaware 19904.

- D. Proposers are fully responsible for the timely delivery of proposals. Late proposals will not be accepted and will be returned to the proposer unopened. Telegraph, telephone, facsimile machine, and electronic mail proposals will not be accepted under any circumstances.
- E. In the event that personal interviews are deemed necessary, and your business is included among those selected for interview, you will be contacted in order to schedule a mutually agreeable date and time for the interview.
- F. It is anticipated that a final decision on the business to be selected will be made within 30 days or upon approval by City Council, whichever occurs earlier. All proposers will subsequently be contacted and advised of the Department's decision.

II. TERMS AND CONDITIONS

- A. The City reserves the right to reject any or all proposals, with or without cause, to waive technicalities, or to accept the proposals which in its judgment best serves the interests of the City. The City further reserves the right to award the contract to the next most qualified proposer if the successful proposer does not execute a contract within thirty (30) days after being notified of the award of the proposal.
- B. The City reserves the right to request clarification of information submitted and to request additional information from one or more proposers. All costs associated with the presentation of the proposal and any supplemental information shall be borne solely by the proposer and shall not be passed on to the City under any circumstances.
- C. Any proposal may be withdrawn until the date and time stated above for the opening of the proposals. Any proposals not so withdrawn shall constitute an irrevocable offer to sell to the City the services indicated for a period of ninety (90) days, or until one or more of the proposals have been accepted by the Department, whichever occurs earlier.
- D. Any written agreement or contract resulting from the acceptance of a proposal shall be prepared on forms either supplied by or approved by the City, and shall contain, at a minimum, applicable provisions of this Request for Proposal. The City reserves the right to reject any agreement that does not conform to the Request for Proposal or any other City requirements for agreements and contracts. The following are representative of the provisions to be included within the contract documents:
 - 1. Termination - If through any cause, the firm selected shall fail to fulfill the obligations agreed to in a timely and efficient manner, the City shall have the right to terminate the contract by specifying the date of termination in a written notice to the firm at least thirty (30) days before the termination date. In this event, the firm shall be entitled to just and equitable compensation for the work satisfactorily completed.

2. Assignment - The Proposer shall not assign any interest in the contract and shall not transfer any interest in the same without the prior written consent of the City.
 3. Non-discrimination - The successful Proposer must specify in the contract that the firm will not discriminate under the contract, against any person as provided in any federal, state, or local government laws and regulations.
 4. Certificate of Insurance - Design /Builder shall provide proof of insurance including certificate of insurance, Declaration Page, and Insurance policy documents.
 5. Publication of Information - No reports, information, or data given to or prepared by the firm under the contract shall be made available to any individual or organization by the firm without the prior written approval of the City. This provision shall only apply insofar as it does not conflict with the provisions of the Freedom of Information Act.
- E. The successful Proposer shall be required to enter into a contract with the City of Dover which shall reflect the services requested in the Request for Proposal, without delay upon notice of award of contract.

III. INSURANCE REQUIREMENTS

Policies Required. Prior to the commencement of any work under Project Proposal No. 25-0018WW and until completion and final payment is made for the work / final acceptance of the work, the Contractor will provide and maintain the following minimum levels of insurance at Contractor's own expense. The cost of the required insurance shall be included in the Contractor's proposal price and no adjustment shall be made to the contract price on account of such costs unless such approval is provided. The term Contractor shall include Subcontractors and Sub-Subcontractors of every tier. Contractor shall furnish Certificates of Insurance evidencing and reflecting the effective date of coverage as outlined below. In no event shall Work be performed until the required evidence of Insurance is provided in accordance with these Contract Documents and is approved by City of Dover ("Owner"). If found to be non-compliant, Owner may purchase the required insurance coverage(s) and the cost will be borne by the Contractor through direct payment/reimbursement to Owner or Owner may withhold payment to the Contractor for amounts owed to them.

- a. All insurance shall be procured from insurers permitted to do business in the State in which the project is taking place and having an A.M. Best Rating of at least "A-, Class VIII".
- b. Contractor shall not have a Self Insured Retention (SIR) on any policy greater than \$50,000, which is the responsibility of the Contractor. If Contractor's policy(ies) has a Self Insured Retention exceeding this amount, approval must be received from the Owner prior to starting work. In the event any policy includes an SIR, the Contractor is solely responsible for payment within the SIR of their policy(ies) and the

Additional Insured requirements specified herein shall be provided within the SIR amount(s).

- c. All insurance required herein, with the exception of the Professional Liability Insurance, shall be written on an “occurrence” basis. Claims-Made coverage must include:
 - i. The retroactive date must be on or prior to the start of work under this contract; and
 - ii. The Contractor must purchase “tail coverage/an extended reporting period” or maintain coverage for a period of three years, subsequent to the completion of their work / final payment.
- d. The Contractor’s insurance carrier (s) shall agree to provide at least thirty (30) days prior written notice to the Owner in the event coverage is canceled or non-renewed. In the event of cancellation or non-renewal of coverage(s), it is the Contractor’s responsibility to replace coverage to comply with the Contract requirements so there is no lapse of coverage for any time period.

In the event the insurance carriers will not issue or endorse their policy(s) to comply with the above it is the responsibility of the Contractor to report any notice of cancellation or non-renewal at least thirty (30) days prior to the effective date of this notice.

- e. Contractor shall provide the Owner with Certificates of Insurance, evidencing the insurance coverages listed below, ten days prior to the start of work and thereafter upon renewal or replacement of each coverage. The Contractor shall not begin any work until the Owner has reviewed and approved the Certificate of Insurance. The required insurance shall not contain any exclusions or endorsements, which are not acceptable to the Owner.

Failure of the Owner to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

With respect to insurance maintained after final payment in compliance with a requirement below, an additional certificate(s) evidencing such coverage shall be provided to the Owner with final application for payment and thereafter upon renewal or replacement of such insurance until the expiration of the time period for which such insurance must be maintained.

- f. Owner/Client and the Owner, (including the Owner’s Parent, Subsidiaries, and Affiliates) shall be added as ADDITIONAL INSUREDS on all liability policies (except Workers’ Compensation and Professional Liability Policy, where applicable), for ongoing operations and completed operations (using ISO Endorsements CG 2010 and CG 2037, or their equivalents) on a primary noncontributory basis. Coverage to include ongoing and completed operations. Each of the Additional Insured’s respective directors, officers, partners, members, employees, agents and

representatives shall also be afforded coverage as an Additional Insured. Coverage should be provided for a period of three years subsequent to the completion of work/final payment.

If you are operating in a state that has implemented the “Anti-Indemnity” Additional Insured Endorsements, you are required to provide the state specific additional insured endorsements for ongoing and completed operations. These states include but are not limited to: Montana, New Mexico, Oregon, Colorado, Kansas, California, Louisiana, and Texas.

The Owner reserves the right to require Contractor to name other parties as additional insureds as required by the Owner.

There shall be no “Insured versus Insured Exclusion” on any policies (other than “Named Insured versus Named Insured”); all policies will provide for “cross liability coverage” as per standard ISO policy forms.

- g. Waiver of Rights of Subrogation: Contractor shall waive all rights of recovery against Owner/Client, the Owner and all the additional insureds for loss or damage covered by any of the insurance maintained by the Contractor.
- h. The amount of insurance provided in the required insurance coverages, shall not be construed to be a limitation of the liability on the part of the Contractor.
- i. The carrying of insurance described shall in no way be interpreted as relieving the Contractor of any responsibility or liability under the contract.
- j. Any type of insurance or any increase in limits of liability not described above which the Contractor requires for its own protection or on account of statute shall be its own expense.
- k. Contractor shall promptly notify the Owner and the appropriate insurance company(ies) in writing of any accident(s) as well as any claim, suit or process received by the Contractor arising in the course of operations under the contract. The Contractor shall forward such documents received to his insurance company(ies), as soon as practicable, or as required by their insurance policy(ies).

REQUIRED COVERAGES - the following may be provided through a combination of primary and excess policies in order to meet the minimum limits set forth below:

1. Workers’ Compensation and Employer’s Liability:

Provided in the State in which the work is to be performed and elsewhere as may be required and shall include:

- a. Workers’ Compensation Coverage: Statutory Requirements
- b. Employers Liability Limits not less than:

Bodily Injury by Accident:	\$100,000 Each Accident
Bodily Injury by Disease:	\$100,000 Each Employee
Bodily Injury by Disease:	\$500,000 Policy Limit

- c. USL&H, Maritime Liability, FELA, and DBA Coverage, if applicable.
- d. Includes coverage for sole proprietors, partners, members or officers who will be performing the work.
- e. Where applicable, if the Contractor is lending or leasing its employees to OWNER for the work under this contract (e.g. crane rental with operator), it is the Contractor's responsibility to provide the Workers Compensation and Employer's Liability coverage and to have their policy endorsed with the proper Alternate Employer Endorsement in favor of OWNER.

2. Commercial General Liability:

Provided on ISO form CG 00 01 04 13 or an equivalent form including Premises - Operations, Independent Contractors, Products/Completed Operations, Broad Form Property Damage, Contractual Liability, and Personal Injury and Advertising Injury.

- a. Occurrence Form with the following limits:

(1) General Aggregate:	\$2,000,000
(2) Products/Completed Operations Aggregate:	\$2,000,000
(3) Each Occurrence:	\$1,000,000
(4) Personal and Advertising Injury:	\$1,000,000
- b. Products/Completed Operations Coverage must be maintained for a period of at least three (3) years after final payment / completion of work (including coverage for the Additional Insureds as set forth in these Insurance Requirements).
- c. The General Aggregate Limit must apply on a **Per Project basis**.
- d. No Exclusions for residential construction with respect to the work to be completed by the Contractor.
- e. Coverage for "Resulting Damage".
- f. No sexual abuse or molestation exclusion.
- g. No amendment to the definition of an "Insured Contract".
- h. The definition of an "Insured Contract" must be amended to provide coverage for all work on or within 50 feet of a railroad, if applicable. A stand alone Railroad Protective Liability policy may be required based on the scope of this project.

3. Automobile Liability:

- a. Coverage to include All Owned, Hired and Non-Owned Vehicles (or "Any Auto"), if you do not have any Owned Vehicles you are still required to maintain coverage for Hired and Non-Owned Vehicles as either a stand alone policy or endorsed onto the Commercial General Liability policy above

c. Privacy Breach Notification and Credit Monitoring: \$250,000 Per Occurrence

IV. PROPOSAL PROCESS SCHEDULE

A. The City will use the following tentative timetable in the selection process, which should result in the selection of a Contractor by Tuesday, January 28, 2025:

Date	Event
Wednesday January 22 & January 29, 2025	Publicly Advertise RFP 25-0018WW.
Wednesday February 05, 2025	Mandatory Pre-proposal Meeting to be held at the John W. Pitts Center, 10 Electric Avenue, Dover, DE 19904 @ 1:00 p.m. The doors will be locked at 1:00 pm
Wednesday February 19, 2025	Deadline for submitting questions
Wednesday February 26, 2025	Addendum issued/answers to proposer questions published.
Wednesday March 12, 2025	PROPOSAL OPENING Deadline to submit final proposals Proposal Opening). (3 original copies and 1 electronic by 2:00 pm)
Friday April 11, 2025	City Completes Evaluation of Proposals
Tuesday April 29, 2025	City Issues Notice of Award
Monday May 05, 2025	Contract Execution

END OF SECTION

SECTION 00 22 00

SUPPLEMENTARY INSTRUCTIONS

Proposals will be received by the City of Dover (herein called the "Owner") at the City of Dover, City of Dover Department of Central Services, 710 William Street, Dover, Delaware 19903-0475, at the date and time stated in the Request for Proposal.

Each proposal must be submitted in a sealed envelope, addressed to the City of Dover, Attn: Mr. Barry Wolfgang, City of Dover Department of Central Services, 710 William Street, Dover, Delaware 19903-0475. Each sealed envelope containing a proposal must be plainly marked "Sealed Proposal: SCADA Equipment Upgrade RFP Opening March 12, 2025 2:00 P.M. Proposal No.: 25-0018WW" and the envelope should bear on the outside the name of the Proposer, their address, license number, if applicable, and the name of the project for which the proposal is submitted. If forwarded by mail, the sealed envelope containing the proposal must be enclosed in another envelope addressed to the OWNER at the City of Dover, 710 William Street, Dover, Delaware 19903-0475.

All proposals must be made on the required Proposal Form. All blank spaces for proposal prices must be filled in, in ink or typed, and the Proposal Form must be fully completed and executed when submitted. Three (3) copies and one (1) electronic copy of the Proposal Form are required.

The Owner may waive any informalities or minor defects or reject any and all proposals. Any proposal may be withdrawn prior to the above scheduled time for the opening of proposals or authorized postponement thereof. Any proposal received after the time and date specified shall not be considered. No Proposer may withdraw a proposal within ninety (90) days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the Owner and the Proposer.

Proposer must satisfy themselves of the accuracy of the estimated quantities in the Proposal Schedule by examination of the site and review of the drawings and specifications including Addenda.

After proposals have been submitted, the Proposer shall not assert that there was a misunderstanding concerning the quantities of Work or of the nature of the Work to be done.

The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve them from fulfilling any of the conditions of the contract.

Each proposal must be accompanied by a Proposal Bond payable to the Owner in the amount of ten (10%) percent of the total amount of the Proposal Price. When the Agreement is executed the

Proposal Bonds of the unsuccessful Proposer will be destroyed. A certified check may be used in lieu of a Proposal Bond.

A Performance Bond in the amount of one hundred (100%) percent of the Contract Price, with a corporate surety approval by the Owner, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign Proposal Bond must file with each Bond a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the Performance Bond within ten (10) calendar days from the date when Notice of Award is delivered to the Proposer. The Notice of Award shall be accompanied by the necessary Agreement and Bond forms. In case of failure of the Proposer to execute the Agreement, the Owner may at their option consider the Proposer in default, in which case the Proposal Bond accompanying the proposal shall become the property of the Owner.

The Owner shall, within ten (10) days of receipt of acceptable Performance Bond, and Agreement signed by the party to whom the Agreement was awarded, sign the Agreement and return to such party an executed duplicate of the Agreement. Should the Owner not execute the Agreement within such period, the Proposer may by Written Notice withdraw their signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

The Notice to Proceed shall be issued within ten (10) days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period; the time may be extended by mutual agreement between the Owner and the Contractor.

The Owner may take such investigations as they deem necessary to determine the ability of the Proposer to perform the Work, and the Proposer shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any and all Proposals if the evidence submitted by, or investigation of, such Proposer fails to satisfy the Owner that such Proposer is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein.

To demonstrate qualifications for performing the Work identified within the Contract Documents, Proposers have been requested to submit written evidence of financial position, previous experience, current commitments, and license to perform work in the State of Delaware as stated in the Request for Proposal. Failure to submit the requested information will be deemed sufficient to disqualify the Proposer.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the contract throughout.

Each Proposer is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Proposer to do any of the foregoing shall in no way relieve any Proposer from any obligation in respect to their Proposal.

The successful Proposer shall supply the names and addresses of major material Suppliers and Subcontractors when requested to do so by the Owner.

END OF SECTION

SECTION 00 24 16
SCOPES OF PROPOSALS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Scope of Design Services
 - a. Design Professional Services during preliminary and final design
 - b. Design/Builder Pre-construction services
 - c. Design Professional Services during construction and commissioning phases
- B. Related Requirements
1. The summary scope of construction services is provided in Section 01 10 00 – SUMMARY.

1.02 REFERENCES

A. Reference Standards

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

1. ASTM International (ASTM)
 - a. UNIFORMAT II
2. Construction Specifications Institute (CSI)
 - a. MasterFormat®
 - b. Unifomat™
3. Institute of Electrical and Electronics Engineers (IEEE)
 - a. IEEE Standard 315 – IEEE Graphic Symbols for Electrical and Electronics Diagrams (Including Reference Designation Letters)
 - b. IEEE Standard 315A – Supplement to Graphic Symbols for Electrical and Electronics Diagrams
4. International Society of Automation (ISA)
 - a. ISA Standard S5.1 – Instrumentation Symbols and Identification
 - b. ISA Standard S20 – Specification Forms for Process Measurement and Control Instruments Primary Elements and Control Valves

1.03 DESIGN PROFESSIONAL SERVICES – DESIGN PHASE

- A. Provide Design Professional Services described in General Conditions, as amended by the Supplementary Conditions, and described in this section.
- B. Review of the design will be performed by the Owner.
- C. Changes in the scope of services during the design phase must be addressed by the Design/Builder before the work is performed.
- D. Coordinate with the City's water treatment and production division to determine the use of the existing SCADA system and determine if the existing SCADA system can be utilized until commissioning of the new SCADA system or if all or certain components of the existing system will be required to be operated manually.
- E. Meetings
 - 1. Attend periodic meetings with the Owner at their office or designated site.
 - 2. Allow no less than ten (10) working days in the schedule prior to each meeting for review of information by Owner.
 - 3. The following meetings will be required during the design phase:
 - a. An initial conference that will include initial concept of proposer and requirements determined by Owner.
 - b. Concept Design review.
 - c. Two (2) Design Development progress reviews (at approximately 30% and 60% completion) of design drawings and specifications and to prepare for permit submittals.
 - d. Pre-final Design review.
 - e. Final Design review.
 - 2. Prepare notes summarizing the discussions and the conclusions from the meetings and distribute the notes within seven (7) days following the meeting.
- F. Memoranda
 - 1. Design Memorandum
 - a. Prepare a design memorandum summarizing design data, in outline format, along with other pertinent project information. The primary intent of the memorandum is to allow Owner to review and comment on the design before the Design/Builder proceeds with detailed design.
 - b. Update the memorandum throughout the design and submit it to the Owner with each updated design.
 - c. Modify the design memorandum to address comments and action items developed during design review meetings.
- G. Design Investigations

1. Verify existing conditions and supplement with additional site visits as necessary to adequately complete the design and file permit applications if necessary.
2. Review SCADA communication options (e.g. cellular, radio, etc.) and determine which will best meet the objectives of the Owner and file permit applications if necessary.

H. Design Drawings

1. Prepare a complete and coordinated set of design drawings with an adequate level of detail to allow for review and approval by permitting agencies and construction by the Design/Builder.
2. Do not include extensive notes and written instructions that are more appropriate for the specifications.
3. Use electrical drafting symbols conforming to IEEE Standard 315 and 315A. Specific requirements for the design of instrumentation and controls for water treatment processes or water distribution, where applicable, are:
 - a. Conduct on-site investigations, interface with process engineer, and review design materials and drawings to determine the type and location of primary sensors, control devices, panels and related instruments, and control equipment. Include the locations, elevations, and mounting details for these devices on the Drawings.
 - b. Prepare Remote Terminal Unit (RTU) Interconnection drawings (input/output point lists). Ensure the RTU interconnection drawings can be provided back to the Owner as record drawings.

I. Technical Specifications

1. Ensure specifications reflect only the scope of work for the current project. Modify standard specifications to exclude items not applicable to the current project.
3. Prepare specifications using the most current version of Microsoft Word for Windows word processor. Convert standard specifications in a format other than Microsoft Word to Microsoft Word format, thoroughly check to ensure that a complete conversion was accomplished (including each table, chart, header, and footer), then edit for this project as appropriate within Microsoft Word.
4. When a proprietary product, named manufacturer, or supplier has been specified by the Owner, do not include provisions for submitting substitute or "or equal" materials or equipment in the Design/Builder's specifications.
5. To ensure competitive pricing is being obtained for material and equipment that is not necessary to be a sole source item, it is recommended that at least three (3) acceptable manufacturers or products

be listed in the specifications for each of these items. Specifying less than three (3) manufacturers is acceptable only when approved by the Owner in cases where the products of additional manufacturers are not deemed to be comparable or do not meet the project requirements.

6. If design details have been used on the drawings that are based on one (1) of the listed products, this should be noted in the specifications. If design revisions are necessary to accommodate the other acceptable products, provide additional details for the other products to facilitate complete and accurate proposals.
7. Where an item is to be furnished on a sole source basis, only one (1) acceptable manufacturer or product will be listed in the specifications.
8. If common items are included in multiple specification sections, language is to be included in the specifications that the same manufacturer is to be used for these common products.
9. Specifications for materials or products that are written by performance or by reference to applicable standards do not need to include specific manufacturers or products unless desired by the Design/Builder.

J. Permit Applications

1. Determine which Local, State, and Federal permits are required for the facility, if any.
2. Provide Owner with information regarding the approximate length of review time for each permit, and special requirements that could delay this process (e.g., public hearings, public advertisement).
3. Prepare the necessary applications, submit the necessary applications (including permit fees) and provide technical input as required in securing applicable permits.
4. When required by the permitting agency, the permit applications will be formally submitted by Owner once Contractor has completed applications. All fees shall be paid by the Contractor.

K. For intermediate review purposes, provide a total of one (1) set of design memoranda, drawings, and specifications to be used during the design period prior to each meeting. Provide one (1) set of final drawings and specifications along with final design information at the completion of design. Submit information in electronic format. Include design notes and calculations, the design memorandum, drawings, and specifications. Submit electronic information via e-mail or ShareFile. Provide one (1) set of full-size plans at the completion of final design phase, along with an electronic PDF format set.

L. Perform a constructability and Value Engineering review with participation of Owner. Review each element of construction work with consideration given to feasible methods of construction, constraints to construction (e.g., materials,

labor, specialty construction, weather, plant operations), design details, time required to complete each element of work, and possible alternatives that would reduce costs.

1.04 DESIGN/BUILDER PRE-CONSTRUCTION SERVICES

- A. Make arrangements, schedule, chair, and take minutes for meetings during the design phase portion of the project.
- B. Prepare and maintain a progress schedule throughout the duration of the design and construction phases.
- C. Construction Sequence and Logistics Plan
 - 1. Prepare a detailed construction sequence and logistics plan describing how the proposed improvements will be completed and placed in-service while maintaining existing service as necessary.
 - 2. Consider seasonal limitations and specifically define each partial or full outage (including electrical) with estimated time for each outage and details on proposed time of day (i.e., regular working hours or evening/weekend hours), proposed time of year (i.e., during peak or off-peak demand seasons) and special precautions, actions, and temporary facilities that will be required to safely complete each outage.
 - 3. Obtain Owner approval to ensure that operations of existing facilities will be properly maintained during construction.
 - 4. Submit the plan in conjunction with the second Design Development progress review (i.e., 60% completion).
- D. Constructability Reviews
 - 1. Provide constructability reviews at the Design Development reviews and the Pre-final design review.
 - 2. Review each element of construction work with consideration given to feasible methods of construction, constraints to construction (materials, labor, specialty construction, weather, plant operations, etc.) design details, time required to complete each element of work, and possible alternatives which would reduce costs, and maintain the level of quality expected by the Owner.
 - 3. Include the appropriate Design Professionals, the Owner, and Subcontractors if required as participants.
 - 4. Include providing the net cost and or time savings associated with each suggested change or modification to the design.
 - 5. Maintain a log tracking each suggestion with the results pertaining to cost and time savings and record decisions made regarding acceptance, partial acceptance, or rejection of each proposed change.

1.05 DESIGN PROFESSIONAL SERVICES - CONSTRUCTION/COMMISSIONING PHASE

- A. Attend construction progress meetings, resolve construction problems related to the design, and review and interpret the design.
- B. Review shop drawings including review of resubmittals, and maintain a shop drawing log indicating dates received, returned, and disposition.
- C. Prepare supplementary detailed working drawings, specifications, and written instructions and participate in meetings, as necessary, throughout the construction period to interpret the contract plans and documents and to resolve changes brought about by actual field conditions encountered.
- D. Instrumentation and Control System Inspections
 - 1. Ensure the system has been assembled properly and is in proper working order and witness testing of each individual I/O point.
 - 2. Witness simulation and testing of the control logic to ensure compliance with the process design and intended operation of the system.
 - 3. Visit the site(s) to review and inspect the operation of field mounted instruments and resolve problems during system start-up.
- E. Commissioning Support
 - 1. Participate in and observe each process and phase of initial operation of the project (start-up) and review operation and performance tests required by the contract specifications.
- F. Prepare and submit record documents.
- G. Operations and Maintenance (O&M) Manual
 - 1. Provide an operation and maintenance manual containing operating, maintenance, and repair information from manufacturer's submittals.
 - 2. Include the final narrative description of the operation of the proposed facility, and a complete description of start-up and shut-down procedures as it pertains to the upgraded SCADA system.
 - 3. Bind the O&M manual in 3-ring binders and index with tabs according to major process designations in the order of the treatment process.
 - 4. Provide one (1) complete hard copy and one (1) complete electronic copy of the final O&M manual.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 00 42 53

PROPOSAL FORM – DESIGN/BUILD (SINGLE-PRIME CONTRACT)

P-1 PROJECT IDENTIFICATION:

SCADA Equipment Upgrade

Proposal Number: 25-0018WW

P-2 THIS PROPOSAL IS SUBMITTED TO:

Barry Wolfgang
City of Dover Department of Central Services
710 William Street
Dover, Delaware 19904
(302) 736-7795
Fax (302) 736-7178

P-3 PROPOSER’S OBLIGATIONS AND REPRESENTATIONS

- 3.01 The undersigned Proposer proposes and agrees, if this Proposal is accepted, to enter into an Agreement with Owner in the form included in the Contract Documents to perform all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Times indicated in this Proposal and in accordance with the other terms and conditions of the Contract Documents.
- 3.02 Proposer accepts all of the terms and conditions of the Proposal documents, including without limitation those dealing with the disposition of the Proposal security. This Proposal will remain subject to acceptance for 90 days after the day of Proposal opening. Proposer will sign and deliver the required number of counterparts of the Agreement with any Bonds and other documents required by the Request for Proposal and Proposal Form within 15 days after the date of Owner’s Notice of Award.
- 3.03 In submitting this Proposal, Proposer represents and agrees, as more fully set forth in the Agreement, that:
 - A. Proposer has examined and carefully studied the Proposal Documents and the following Addenda (receipt of all which is hereby acknowledged)

Addendum No.	Addendum Date
_____	_____
_____	_____

- B. Proposer has visited the Site(s) and become familiar with the general, local and Site conditions that may affect cost, progress, performance and furnishing of the Work.
- C. Proposer is familiar with all applicable federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.
- D. Proposer has carefully studied all available reports and all available drawings of the existing Site(s) which have been identified or made available by Owner.
- E. Proposer is aware of the general nature of the work to be performed by Owner and others at the Site that relates to Work for which this Proposal is submitted as indicated in the Contract Documents.
- F. Proposer has correlated the information known to Proposer, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- G. Proposer has given Owner written notice of all conflicts, errors, ambiguities or discrepancies that Proposer has discovered in the Contract Documents and the written resolution thereof by Owner is acceptable to Proposer, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Proposal is submitted.
- H. This Proposal is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Proposer has not directly or indirectly induced or solicited any other Proposer to submit a false or sham Proposal; Proposer has not solicited or induced any individual or entity to refrain from submitting a Proposal; and Proposer has not sought by collusion to obtain for itself any advantage over any other Proposer or over Owner.

P-4 CONTRACT PRICE

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

LUMP SUM CONTRACT PRICE

- 1. _____ (\$ _____)
 _____ (use words) (figures)
- 2. Option 1 – Annual Cost 24/7 Tech Support for the Upgraded SCADA System. _____ (\$ _____)
- 3. **Proposed LUMP SUM CONTRACT PRICE includes improvements to all 22 facilities and any upgrades to the master SCADA at the main water treatment plant to meet or exceed the scope of work proposed in this RPF 25-0018WW.**
- 4. **All specific cash allowances are included in the price(s) set forth above and have been computed in Accordance with paragraph 10.02 of the General Conditions.**

P-5 CONTRACT TIMES

- 5.01 Proposer agrees that the Work will be substantially completed and ready for final payment in accordance with paragraphs 13.05 and 13.08 of the General Conditions on or before the dates or within the number of calendar days indicated below.
- 5.02 Proposer hereby agrees to commence WORK under this contract on or before a date to be specified in the Notice to Proceed and to fully complete the Project within _____ (____) calendar days thereafter. Liquidated damages of \$500 per day will be in effect with this PROJECT for each any every day that the Design / Builder is in default in completing the Contract.

P-6 EXHIBITS

- 6.01 The following documents are attached to and made a condition of this Proposal:
 - A. Required Proposal security in the form of _____.
 - B. The individual or entity providing the Design Professional Services will be _____.
 - C. A tabulation of Subcontractors, Suppliers and others required to be identified in this Proposal.
 - D. Required Proposer’s Qualification Statement with supporting data (See Section 00 11 19, 3.01).

P-7 TERMINOLOGY

7.01 The terms used in this Proposal which are defined in the General Conditions of the Contract Between Owner and Design/Builder (“General Conditions”) included as part of the Contract Documents have the meanings assigned to them in the General Conditions. Terms defined in the Request for Proposal are used with the same meaning in this Proposal.

P-8 VENDOR PREFERENCE

Local Vendor Preference

Circle One: Rule 1 Rule 2 Rule 3 None

Minority Vendor Preference

Circle One: Yes No

P-8 SUBMISSION

SUBMITTED on

State Contractor License No. (If Applicable).

State Certificate of Authority for Corporate Engineering Practice (If Applicable):

If Proposer is:

An Individual

By: _____ (SEAL)

(Individual’s Name)

doing business

as

Business

address: _____

Phone No.: _____

Facsimile No.: _____

A Partnership

By: _____ (SEAL)

(Firm Name)

(general partner)

Business

address: _____

Phone No.: _____

Facsimile No.: _____

A Corporation

By: _____ (SEAL)
(Corporation Name)

(state of incorporation)

By: _____ (SEAL)
(name of person authorized to sign)

(Title)

(Corporate Seal)

Attest _____
(Secretary)

Business address: _____

Phone No.: _____

Facsimile No.: _____

Date of Qualification to do business as a foreign (out-of-state) corporation in state where Project is located (if applicable): _____

A Joint Venture

By: _____ (SEAL)
(Name)

(Address)

By: _____ (SEAL)
(Name)

(Address)

Business address: _____

Phone No.: _____

Facsimile No.: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

END OF SECTION

SECTION 00 43 13
PROPOSAL SECURITY FORM

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Proposal Security Form

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 ATTACHMENTS

- A. Forms
 - 1. Proposal Bond

END OF SECTION

PROPOSAL BOND

KNOWN ALL PERSONS BY THESE PRESENTS, that we, the Undersigned _____ as Principal, and _____ as Surety, are Hereby held and firmly bound unto the City of Dover, as OWNER, the penal sum of _____ (\$_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____ 2025.

The Condition of the above obligation is such that whereas the Principal has submitted to the City of Dover a certain PROPOSAL, attached hereto and hereby made a part hereof to enter into a contract in writing, for the SCADA Equipment Upgrade Proposal No.: 25-0018WW.

NOW, THEREFORE,

- a) If said PROPOSAL shall be rejected, or
- b) If said PROPOSAL shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (properly completed in accordance with said PROPOSAL) and shall furnish a BOND for faithful performance of said contract, and for the payment of all persons performing labor and furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said PROPOSAL, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the owner may accept such PROPOSAL; and said Surety does hereby waive notice of any extension.

In WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above. Surety executing Bonds shall be a licensed agent in the State of Delaware.

_____(L.S.)
Principal

Surety

By: _____

IMPORTANT – Surety companies executing BONDS must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

END OF SECTION

SECTION 00 52 53

AGREEMENT FORM – DESIGN/BUILD (SINGLE-PRIME CONTRACT)

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Agreement Form – Design/Build (Single-Prime Contract)

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 ATTACHMENTS

A. Forms

1. City of Dover Agreement for Professional Services

END OF SECTION

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made as of the ____ day of _____ in the year 2025, between The City of Dover, a Delaware Municipal Corporation, whose address is 15 Loockerman Plaza, Dover, Delaware 19901 (hereinafter referred to as the CITY), and _____ (COMPANY NAME), whose address is, _____ (hereinafter referred to as the CONTRACTOR).

NOW, THEREFORE, in consideration of the mutual benefits accruing to the parties to this Agreement, and for other good and valuable considerations, the parties agree as follows:

1. SERVICES

The CONTRACTOR shall perform the following services as identified in the:
See Request for Proposal for SCADA Equipment Upgrade, Proposal No.: 25-0018WW and the submitted Proposal Form.

Nothing herein shall limit the CITY's right to obtain proposals or services from other professionals for similar projects at any time the City so chooses.

2. INDEMNIFICATION

The Contractor, and any agent or subcontractor, shall defend, indemnify and hold harmless the City of Dover and its officials, officers, board members, council members, commissioners, representatives, employees, agents, and contractors, against any and all liability, costs, damages, fines, taxes, special charges by others, penalties, payments (including payments made under any Workers' Compensation Laws or under any plan for employees' disability and death benefits), and expenses (including reasonable attorney fees of the City of Dover and all other costs and expenses of litigation). Claims arising in any way, including any act, omission, failure, negligence or willful misconduct, in connection with the work, construction, maintenance, repair, presence, use, or operation by Contractor, or Contractors officers, directors, employees, agents, and sub-contractors, shall be responsible for Claims. Such Claims include, but are not limited to, the following:

- A. Intellectual property infringement, libel and slander, trespass, unauthorized use of television or radio broadcast programs and other program material, and infringement of patents;
- B. Cost of work performed by City of Dover that was necessitated by Contractors failure, or the failure of Contractors officers, directors, employees, agents, or sub-contractors, to perform work, or maintain City of Dover facilities in accordance with the requirements and specifications of this Agreement, or from any other work authorized under this Agreement;
- C. Damage to property, injury to or death of any person arising out of the performance or nonperformance of any work or obligation undertaken by Contractor, or Contractors

officers, directors, employees, agents, and sub-contractors, pursuant to this Agreement;

3. PROCEDURE FOR INDEMNIFICATION

- A. City of Dover shall give notice promptly to Contractor of any claim or threatened claim, specifying the factual basis for such claim and the amount of the claim. If the claim relates to an action, suit or proceeding filed by a third party against City of Dover, the notice shall be given to Contractor by City of Dover no later than ten (10) calendar days after written notice of the action, suit or proceeding was received by City of Dover.
- B. Failure to timely give the required notice will not relieve the Contractor from its obligation to indemnify the City of Dover unless the City of Dover is materially prejudiced by such failure.
- C. The City of Dover will have the right at any time, by notice to the Contractor, to participate in or assume control of the defense of the claim with counsel of its choice, which counsel must be reasonably acceptable to the Contractor. The Contractor agrees to cooperate fully with the City of Dover. If the City of Dover so assumes control of the defense of any third-party claim, the Contractor shall have the right to participate in the defense at its own expense. If the Contractor does not so assume control or otherwise participate in the defense of any third-party claim, it shall be bound by the results obtained by the City of Dover with respect to the claim.
- D. If the City of Dover assumes the defense of a third-party claim as described above, then in no event will the City of Dover admit any liability with respect to, or settle, compromise or discharge, any third party claim without the Contractors prior written consent, and the Contractor will agree to any settlement, compromise or discharge of any third-party claim which the City of Dover may recommend which releases the City of Dover completely from such claim.
- E. Municipal Liability Limits. No provision of this Agreement is intended, or shall be construed, to be a waiver for any purpose by either Utility of any applicable State limits on municipal liability.
- F. Disclaimer: The City of Dover makes no express or implied warranties with regard to its structures, fixtures, materials, or other equipment, all of which are hereby disclaimed. The City of Dover makes no other express or implied warranties, except to the extent expressly set forth in this Agreement. The City of Dover expressly disclaims any implied warranties of merchantability or fitness for a particular purpose.
- G. Duty to Competent Supervision and Performance. The Contractor shall ensure that its employees, servants, agents, and subcontractors have the necessary qualifications, skill, knowledge, training, and experience to protect themselves, their fellow employees, employees of the Utility, and the general public, from harm or injury while performing work permitted pursuant to this Agreement. In addition, the Contractor shall furnish its employees, servants, agents, and subcontractors with competent

supervision and sufficient and adequate tools and equipment for their work to be performed in a safe manner.

H. Duty to Inform. The Contractor further warrants that it understands the imminent dangers (INCLUDING SERIOUS BODILY INJURY OR DEATH FROM FALLING) inherent in the work necessary to perform the work expected under this agreement by Contractors employees, servants, agents, contractors or subcontractors, and accepts as its duty and sole responsibility to notify and inform Contractors employees, servants, agents, contractors or subcontractors of such dangers, and to keep them informed regarding same.

4. **INSURANCE**

Policies Required. Prior to the commencement of any work under Project Proposal No. 25-0018WW and until completion and final payment is made for the work / final acceptance of the work, the Contractor will provide and maintain the following minimum levels of insurance at Contractor's own expense. The cost of the required insurance shall be included in the Contractor's proposal price and no adjustment shall be made to the contract price on account of such costs unless such approval is provided. The term Contractor shall include Subcontractors and Sub-Subcontractors of every tier. Contractor shall furnish Certificates of Insurance evidencing and reflecting the effective date of coverage as outlined below. In no event shall Work be performed until the required evidence of Insurance is provided in accordance with these Contract Documents and is approved by City of Dover ("Owner"). If found to be non-compliant, Owner may purchase the required insurance coverage(s) and the cost will be borne by the Contractor through direct payment/reimbursement to Owner or Owner may withhold payment to the Contractor for amounts owed to them.

- a. All insurance shall be procured from insurers permitted to do business in the State in which the project is taking place and having an A.M. Best Rating of at least "A-, Class VIII".
- b. Contractor shall not have a Self Insured Retention (SIR) on any policy greater than \$50,000, which is the responsibility of the Contractor. If Contractor's policy(ies) has a Self Insured Retention exceeding this amount, approval must be received from the Owner prior to starting work. In the event any policy includes an SIR, the Contractor is solely responsible for payment within the SIR of their policy(ies) and the Additional Insured requirements specified herein shall be provided within the SIR amount(s).
- c. All insurance required herein, with the exception of the Professional Liability Insurance, shall be written on an "occurrence" basis. Claims-Made coverage must include:
 - i. The retroactive date must be on or prior to the start of work under this contract; and

- ii. The Contractor must purchase “tail coverage/an extended reporting period” or maintain coverage for a period of three years, subsequent to the completion of their work / final payment.
- d. The Contractor’s insurance carrier (s) shall agree to provide at least thirty (30) days prior written notice to the Owner in the event coverage is canceled or non-renewed. In the event of cancellation or non-renewal of coverage(s), it is the Contractor’s responsibility to replace coverage to comply with the Contract requirements so there is no lapse of coverage for any time period.

In the event the insurance carriers will not issue or endorse their policy(s) to comply with the above it is the responsibility of the Contractor to report any notice of cancellation or non-renewal at least thirty (30) days prior to the effective date of this notice.

- e. Contractor shall provide the Owner with Certificates of Insurance, evidencing the insurance coverages listed below, ten days prior to the start of work and thereafter upon renewal or replacement of each coverage. The Contractor shall not begin any work until the Owner has reviewed and approved the Certificate of Insurance. The required insurance shall not contain any exclusions or endorsements, which are not acceptable to the Owner.

Failure of the Owner to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor’s obligation to maintain such insurance.

With respect to insurance maintained after final payment in compliance with a requirement below, an additional certificate(s) evidencing such coverage shall be provided to the Owner with final application for payment and thereafter upon renewal or replacement of such insurance until the expiration of the time period for which such insurance must be maintained.

- f. Owner/Client and the Owner, (including the Owner’s Parent, Subsidiaries, and Affiliates) shall be added as ADDITIONAL INSUREDS on all liability policies (except Workers’ Compensation and Professional Liability Policy, where applicable), for ongoing operations and completed operations (using ISO Endorsements CG 2010 and CG 2037, or their equivalents) on a primary noncontributory basis. Coverage to include ongoing and completed operations. Each of the Additional Insured’s respective directors, officers, partners, members, employees, agents and representatives shall also be afforded coverage as an Additional Insured. Coverage should be provided for a period of three years subsequent to the completion of work/final payment.

If you are operating in a state that has implemented the “Anti-Indemnity” Additional Insured Endorsements, you are required to provide the state specific additional insured endorsements for ongoing and completed operations. These states include but are not limited to: Montana, New Mexico, Oregon, Colorado, Kansas, California, Louisiana, and Texas.

The Owner reserves the right to require Contractor to name other parties as additional insureds as required by the Owner.

There shall be no “Insured versus Insured Exclusion” on any policies (other than “Named Insured versus Named Insured”); all policies will provide for “cross liability coverage” as per standard ISO policy forms.

- g. Waiver of Rights of Subrogation: Contractor shall waive all rights of recovery against Owner/Client, the Owner and all the additional insureds for loss or damage covered by any of the insurance maintained by the Contractor.
- h. The amount of insurance provided in the required insurance coverages, shall not be construed to be a limitation of the liability on the part of the Contractor.
- i. The carrying of insurance described shall in no way be interpreted as relieving the Contractor of any responsibility or liability under the contract.
- j. Any type of insurance or any increase in limits of liability not described above which the Contractor requires for its own protection or on account of statute shall be its own expense.
- k. Contractor shall promptly notify the Owner and the appropriate insurance company(ies) in writing of any accident(s) as well as any claim, suit or process received by the Contractor arising in the course of operations under the contract. The Contractor shall forward such documents received to his insurance company(ies), as soon as practicable, or as required by their insurance policy(ies).

REQUIRED COVERAGES - the following may be provided through a combination of primary and excess policies in order to meet the minimum limits set forth below:

1. Workers’ Compensation and Employer’s Liability:

Provided in the State in which the work is to be performed and elsewhere as may be required and shall include:

- a. Workers’ Compensation Coverage: Statutory Requirements
- b. Employers Liability Limits not less than:
 - Bodily Injury by Accident: \$100,000 Each Accident
 - Bodily Injury by Disease: \$100,000 Each Employee
 - Bodily Injury by Disease: \$500,000 Policy Limit
- c. USL&H, Maritime Liability, FELA, and DBA Coverage, if applicable.
- d. Includes coverage for sole proprietors, partners, members or officers who will be performing the work.
- e. Where applicable, if the Contractor is lending or leasing its employees to OWNER for the work under this contract (e.g. crane rental with operator), it is the Contractor’s responsibility to provide the Workers Compensation and Employer’s Liability

coverage and to have their policy endorsed with the proper Alternate Employer Endorsement in favor of OWNER.

2. Commercial General Liability:

Provided on ISO form CG 00 01 04 13 or an equivalent form including Premises - Operations, Independent Contractors, Products/Completed Operations, Broad Form Property Damage, Contractual Liability, and Personal Injury and Advertising Injury.

- a. Occurrence Form with the following limits:
 - (1) General Aggregate: \$2,000,000
 - (2) Products/Completed Operations Aggregate: \$2,000,000
 - (3) Each Occurrence: \$1,000,000
 - (4) Personal and Advertising Injury: \$1,000,000
- b. Products/Completed Operations Coverage must be maintained for a period of at least three (3) years after final payment / completion of work (including coverage for the Additional Insureds as set forth in these Insurance Requirements).
- c. The General Aggregate Limit must apply on a **Per Project basis**.
- d. No Exclusions for residential construction with respect to the work to be completed by the Contractor.
- e. Coverage for “Resulting Damage”.
- f. No sexual abuse or molestation exclusion.
- g. No amendment to the definition of an “Insured Contract”.
- h. The definition of an “Insured Contract” must be amended to provide coverage for all work on or within 50 feet of a railroad, if applicable. A stand alone Railroad Protective Liability policy may be required based on the scope of this project.

3. Automobile Liability:

- a. Coverage to include All Owned, Hired and Non-Owned Vehicles (or “Any Auto”), if you do not have any Owned Vehicles you are still required to maintain coverage for Hired and Non-Owned Vehicles as either a stand alone policy or endorsed onto the Commercial General Liability policy above
- b. Per Accident Combined Single Limit \$1,000,000
- c. For Contractor(s) involved in the transportation of hazardous material, include the following endorsements: MCS-90 and ISO-9948.

4. Commercial Umbrella Liability:

- a. Policy(ies) to apply on a Following Form Basis of the following:
 - (1) Commercial General Liability,
 - (2) Automobile Liability, and
 - (3) Employers Liability Coverage.

- b. Minimum Limits of Liability

Occurrence Limit:	\$10,000,000
Aggregate Limit (where applicable):	\$10,000,000

5. **Professional Liability Insurance:**

- a. Minimum Limits of Liability

Per Claim Limit:	\$2,000,000
Aggregate Limit:	\$2,000,000
- b. The Definition of “Covered Services” shall include the services required in the scope of this contract.
- c. Coverage shall be extended to cover “Green Building”, if applicable.

6. **Crime Insurance:**

- a. Include the Employee Theft and Theft, Disappearance and Destruction coverage parts.
- b. The Employee Theft Coverage part shall include the Clients’ Property Endorsement (ISO Form CR 04 01, or its equivalent).
- c. Minimum Limits of Liability:

Per Claim:	\$1,000,000
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7. **Privacy Liability:**

- a. Subcontractor shall maintain coverage for third party liability arising out of breach of privacy, inclusive of confidential and proprietary business information, HIPAA violations and other breaches of personally identifiable information and/or protected health information, that may arise from their work with this contract.
 - b. Minimum Limits of Liability:

Per Claim:	\$1,000,000
Aggregate:	\$1,000,000
 - c. Privacy Breach Notification and Credit Monitoring: \$250,000 Per Occurrence
- A. Qualification; Priority; Contractors’ Coverage. The insurer must be authorized to do business under the laws of the State of Delaware. Such insurance will be primary. All contractors and all of their subcontractors who perform work on behalf of Contractor shall be responsible for carrying, in full force and effect, worker’s compensation and employer’s liability, and automobile liability insurance coverage.
- B. Certificate of Insurance; Other Requirements. At the execution of this Agreement and prior to each insurance policy expiration date during the term of this Agreement,

Contractor will furnish the City of Dover with a Certificate of Insurance with the CITY named as an additional insured. The Certificate shall reference this Agreement and worker's compensation and property insurance waivers of subrogation required by this Agreement. City of Dover shall be given thirty (30) calendar days advance notice of cancellation or nonrenewal of insurance during the term of this Agreement.

- C. Limits. The limits of liability set out in this Agreement may be increased by mutual consent of the parties, which consent will not be unreasonably withheld by either party, in the event of any factors or occurrences, including substantial increases in the level of jury verdicts or judgments or the passage of state, federal or other governmental compensation plans, or laws which would materially increase the City of Dover's exposure to risk.
- D. Deductible/Self-insurance Retention Amounts. Contractor shall be fully responsible for any deductible or self-insured retention amounts contained in its insurance program or for any deficiencies in the amounts of insurance maintained.

5. CODES, LAWS, AND REGULATIONS

The CONTRACTOR will comply with all applicable codes, laws, regulations, standards, and ordinances in force during the term of this Agreement.

6. PERMITS, LICENSES, AND FEES

The CONTRACTOR will obtain and pay for all permits and licenses required by law that are associated with the CONTRACTOR performance of the Scope of Services.

7. ACCESS TO RECORDS

The CONTRACTOR will maintain accounting records, in accordance with generally accepted accounting principles and practices, to substantiate all invoiced amounts. Said records will be available for examination by the CITY during the CONTRACTOR's normal business hours. Said records will be maintained for a period of three (3) years after the date of the invoice.

8. CONTINGENT FEES PROHIBITED

The CONTRACTOR warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the CONTRACTOR, to solicit or secure this Agreement and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONTRACTOR any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. In the event of a breach of this provision, the CITY shall have the right to terminate this Agreement

without further liability and at its discretion, deduct from the contract price, or otherwise recover, the full amount of any such fee, commission, percentage, gift or consideration paid in breach of this Agreement.

9. PAYMENT

It is understood and agreed by and between the parties hereto that this Contract is in the amount of _____ and _____ Dollars [\$\$\$XX.XX] as per the Proposal submitted by the Contractor on ____, 2025, and accepted by the City. The Contractor shall submit an invoice on or about the 15th of each month in which the Contract is in effect for the work completed and verified to date. The City shall pay the Contractor's invoice, less 10% retainage, within thirty (30) days of receipt. The application for payment shall include a description and verification of work completed by the Contractor. All requests for payment shall be submitted on the AIA Document G702 (Application Certificate for Payment) and be accompanied by supporting documentation which will include the percent complete on the proposal items identified in the Proposal Form. Dates of testing and start-up should be provided to the City as required supporting documentation. Any reimbursement for expenses shall include receipts or copies of the invoices. No other costs or services shall be billed to the CITY.

10. INDEPENDENT CONTRACTOR

The CONTRACTOR is an independent contractor and as such will be responsible for paying his own Federal income tax and self-employment tax, or any other taxes applicable to the compensation paid under this agreement.

11. ASSIGNMENT

Neither party shall have the power to assign any of the duties or rights or any claim arising out of or related to the Agreement, whether arising in tort, contract, or otherwise, without the written consent of the other party. These conditions and the entire Agreement are binding on the heirs, successors, and assigns of the parties hereto.

12. NO THIRD PARTY BENEFICIARIES

This Agreement gives no rights or benefits to anyone other than the CONTRACTOR and the CITY.

13. JURISDICTION

The laws of the State of Delaware shall govern the validity of this Agreement, its interpretation and performance, and any other claims related to it. In the event of any litigation arising under or construing this Agreement, venue shall lie only in Kent County, Delaware.

14. TERM AND TERMINATION

All services to be rendered by the CONTRACTOR within the Scopes of Proposals and Summary sections of the Request for Proposals shall be completed within four-hundred

fifty (450) calendar days from the date of the Notice to Proceed. All or part of this Agreement may be terminated by the CITY for its convenience on thirty (30) days written notice to the CONTRACTOR. In such event, the CONTRACTOR will be entitled to compensation for services competently performed up to the date of termination. In the event of termination not the fault of the CONTRACTOR, the CONTRACTOR shall be compensated for with Reimbursable Expenses then due and all Termination Expenses.

15. CONTACT PERSON

The primary contact person under this Agreement for the CONTRACTOR shall be

Name: _____, Phone No.: _____,

Address: _____.

The primary contact person under this Agreement for the CITY shall be Kate L. Mills, P.E., P.O. Box 475, Dover Delaware, 19903. P: 302-674-7562, Department of Water & Wastewater.

16. APPROVAL OF SERVICE PERSONNEL

The CITY reserves the right to approve the contact person and the persons actually performing the services on behalf of the CONTRACTOR pursuant to this Agreement. If the CITY, in its sole discretion, is dissatisfied with the contact person or the person or persons actually performing the services on behalf of the CONTRACTOR pursuant to this Agreement, the CITY may require the CONTRACTOR assign a different person or persons be designated to be the contact person or to perform the services hereunder.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the respective dates under each signature.

(CONTRACTOR)

CITY OF DOVER

By: _____

By: _____

Title: _____

Title: _____

Signature: _____

Signature: _____

Date: _____

Date: _____

ATTACHMENT A
BASIS FOR PAYMENT

SECTION 00 61 13.13
PERFORMANCE BOND FORM

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Performance Bond Form

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 ATTACHMENTS

- A. Forms
 - 1. EJCDC D-610 – Design/Build Contract Performance Bond

END OF SECTION

DESIGN/BUILD CONTRACT PERFORMANCE BOND

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

DESIGN/BUILDER (Name and Address):

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

OWNER

City of Dover, Delaware
City Hall- The Plaza
P.O. Box 475
Dover, Delaware 19903-0475

CONTRACT

Date:
Amount:
Description (Name and Location):

BOND

Bond Number:
Date (Not earlier than Contract Date):
Amount:
Modifications to this Bond Form:

Surety and Design/Builder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

DESIGN/BUILDER AS PRINCIPAL

Company: _____

Signature: _____ (Seal)
Name and Title:

SURETY

Surety's Name and Corporate Seal

By: _____
Signature and Title
(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest: _____
Signature and Title

DESIGN/BUILDER AS PRINCIPAL

SURETY

Company: _____

Signature: _____ (Seal)
Name and
Title:

Surety's Name and Corporate Seal (Seal)

By: _____
Signature and Title
(Attach Power of Attorney)

Attest: _____
Signature and Title

EJCDC No. D-610 (2008 Edition)

1. Design/Builder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.
2. If Design/Builder performs the Contract, Surety and Design/Builder have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.
3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
 - 3.1. Owner has notified Design/Builder and Surety at the addresses described in Paragraph 10 below, that Owner is considering declaring a Design/Builder Default and has requested and attempted to arrange a conference with Design/Builder and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Design/Builder and Surety agree, Design/Builder shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Design/Builder Default; and
 - 3.2. Owner has declared a Design/Builder Default and formally terminated Design/Builder's right to complete the Contract. Such Design/Builder Default shall not be declared earlier than 20 days after Design/Builder and Surety have received notice as provided in Paragraph 3.1; and
 - 3.3. Owner has agreed to pay the Balance of the Contract Price to:
 1. Surety in accordance with the terms of the Contract; or
 2. Another design/builder selected pursuant to Paragraph 4.3 to perform the Contract.
4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:
 - 4.1. Arrange for Design/Builder, with consent of Owner, to perform and complete the Contract; or
 - 4.2. Undertake to perform and complete the Contract itself, through its agents or through independent design/builders; or
 - 4.3. Obtain proposals or negotiated proposals from qualified design-builders acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and a design/builder selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Design/Builder Default; or
 - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new design/builder and with reasonable promptness under the circumstances;

1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
 2. Deny liability in whole or in part and notify Owner citing reasons therefor.
5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.
6. After Owner has terminated Design/Builder's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Design/Builder under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:
- 6.1. The responsibilities of Design/Builder for correction of defective Work and completion of the Contract;
 - 6.2. Additional legal, design professional and delay costs resulting from Design/Builder's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and
 - 6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Design/Builder.
7. Surety shall not be liable to Owner or others for obligations of Design/Builder that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.
8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Design/Builder Default or within two years after Design/Builder ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to Surety, Owner or Design/Builder shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted here from and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Surety's performance obligation includes completion of the design responsibilities of Design/Builder. However, Surety shall not be liable for damages of the type specified to be covered by design/builder's liability insurance required by the Contract Documents even if such insurance was not obtained or is not sufficient to cover the damages.
13. Definitions.
 - 13.1 Balance of the Contract Price: The total amount payable by Owner to Design/Builder under the Contract after all proper adjustments have been made, including allowance to Design/Builder of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Design/Builder is entitled, reduced by all valid and proper payments made to or on behalf of Design/Builder under the Contract.
 - 13.2. Contract: The agreement between Owner and Design/Builder identified on the signature page, including all Contract Documents and changes thereto.
 - 13.3. Design/Builder Default: Failure of Design/Builder, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - 13.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Design/Builder as required by the Contract or to perform and complete or comply with the other terms thereof.

SECTION 00 61 19
MAINTENANCE BOND FORM

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Maintenance Bond Form

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 ATTACHMENTS

- A. Forms
 - 1. Maintenance Bond Form

END OF SECTION

MAINTENANCE BOND

KNOWN ALL PERSONS BY THESE PRESENTS: That

_____ (Name of Contractor)

_____ (Address of Contractor)

a _____ hereinafter called
(Corporation, Partnership or Individual)

Principal, and _____ (Name of Surety)

_____ (Address of Surety)

hereinafter call Surety, are held and firmly bound unto the City of Dover, P.O Box 475, Dover, DE 19903 hereinafter called OWNER, in the total aggregate penal sum of _____ Dollars, (\$ _____) in

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

THE CONDITION OF THIS OBLIGATION is such that,

WHEREAS: The Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 20__ and

WHEREAS: the Contract provides for the construction of: _____

which Contract is by reference incorporated herein, and made a part hereof, and is referred to as the Contract.

WHEREAS: said Contract provides that the Principal shall furnish a maintenance bond, and

WHEREAS: said Contract has been substantially completed, and a Certificate of Substantial Completion was issued on _____.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall remedy any defects due to faulty materials or workmanship, and pay for any damages to other work resulting therefrom, which shall appear within a period of

_____ year(s) from the date of the Certificate of Substantial Completion as stated herein, then this obligation to be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that the OWNER shall give Principal and Surety notice of defects with reasonable promptness.

SIGNED and sealed this the _____ day of _____, 20__.

ATTEST:

(SEAL)

Secretary

Witness as to Principal

Address

Principal
BY: _____ (s)

Address

ATTEST:

(SEAL)

Secretary

Witness as to Surety

Address

Surety
BY: _____ (s)

Attorney-in-Fact

Address

NOTES:

Date of BOND must not be prior to date of Contract.

IF CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury

Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the Project is located.

END OF SECTION

SECTION 00 72 53

GENERAL CONDITIONS – DESIGN/BUILD (SINGLE-PRIME CONTRACT)

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. General Conditions – Design/Build (Single-Prime Contract)

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 ATTACHMENTS

A. Forms

1. EJCDC D-700 – Standard General Conditions of the Contract between Owner and Design/Builder

END OF SECTION

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

STANDARD GENERAL CONDITIONS OF THE
CONTRACT BETWEEN
OWNER AND DESIGN/BUILDER

Prepared by

EJCDC 

ENGINEERS JOINT CONTRACT
DOCUMENTS COMMITTEE

and

Issued and Published Jointly by



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A Practice Division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

These General Conditions have been prepared for use with either one of the two Agreements between Owner and Design/Builder (EJCDC D-520 and D-525, 2009 Editions). Their provisions are interrelated and a change in one may necessitate a change in the others. The comments and instructions contained in the Guide to Use of EJCDC Design/Build Documents (EJCDC D-001, 2009 Edition) are also carefully interrelated with the wording of these General Conditions.

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**STANDARD GENERAL CONDITIONS OF THE
CONTRACT BETWEEN
OWNER AND DESIGN/BUILDER**

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Contract Documents and printed with initial capital letters, the following terms have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. Addenda: Written or graphic instruments issued prior to the opening of Proposals which clarify, correct or change the Request for Proposals or the Contract Documents.
 2. Agreement: The written instrument which is evidence of the agreement between Owner and Design/Builder covering the Work.
 3. Application for Payment: The form which is to be used by Design/Builder in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 5. Bonds: Performance and payment bonds and other instruments of security.
 6. Change Order: A written order which is signed by Design/Builder and Owner which authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
 7. Claim: A demand or assertion by Owner or Design/Builder seeking an adjustment of Contract Price or Contract Times, or both or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a claim.

8. Conceptual Documents: The drawings and specifications and/or other graphic or written materials, criteria and information concerning Owner's requirements for the Project, such as design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, including those items enumerated in the Request for Proposals which show or describe the character and scope of, or relate to, the Work to be performed or furnished and which have been prepared by or for Owner.
9. Construction: The part of the Work that is the result of performing or furnishing of labor, the furnishing and incorporating of materials and equipment into the Work and the furnishing of services (other than Design Professional Services) and documents, all as required by the Contract Documents.
10. Construction Sub-agreement: A written agreement between Design/Builder and a construction Subcontractor for provision of Construction.
11. Contract: The entire and integrated written agreement between Owner and Design/Builder concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
12. Contract Documents: Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.
13. Contract Price: The moneys payable by Owner to Design/Builder for completion of the Work in accordance with the Contract Documents.
14. Contract Times: The numbers of days or the dates stated in the Agreement to:
(i) achieve Substantial Completion, and (ii) complete the Work so that it is ready for final payment in accordance with Paragraph 13.08.
15. Design/Builder: The individual or entity with whom Owner has entered into the Agreement.
16. Design Sub-agreement: A written agreement between Design/Builder and a design professional for provision of Design Professional Services.
17. Design Professional Services: That part of the Work comprised of services relating to the preparation of Drawings, Specifications, and other design submittals specified by the Contract Documents and required to be performed by licensed design professionals, as well as other services provided by or for licensed design professionals during Proposal/Negotiating, Construction, or Operational phases.
18. Drawings: Those portions of the Contract Documents prepared by or for Design/Builder and approved by Owner consisting of drawings, diagrams, illustrations, schedules and other data which show the scope, extent, and character of the Work.

19. Effective Date of the Agreement: The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
20. Field Order: A written order issued by Owner which orders minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
21. Hazardous Environmental Condition: The presence at the Site of Asbestos, Hazardous Waste, PCB's, Petroleum Products or Radioactive Materials in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto on connection with the Work.
22. Hazardous Waste: The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
23. Laws or Regulations: Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.
24. Liens: Charges, security interests or encumbrances upon real property or personal property.
25. Milestone: A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
26. Notice of Award: The written notice by Owner to the successful proposer stating that upon compliance by the successful proposer with the conditions precedent included therein, within the time specified, Owner will sign and deliver the Agreement.
27. Notice to Proceed: A written notice given by Owner to Design/Builder fixing the date on which the Contract Times will commence to run and on which Design/Builder shall start to perform the Work.
28. Owner: The individual or entity with whom Design/Builder has entered into the Agreement and for whom the Work is to be performed.
29. Owner's Consultant: An individual or entity with whom the Owner may contract to furnish services to Owner with respect to the Project and who is identified as such in the Supplementary Conditions.

30. Partial Utilization: Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
31. PCBs: Polychlorinated biphenyls.
32. Petroleum: Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Wastes and crude oils.
33. Project: The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.
34. Proposal: The documents submitted by Design/Builder in response to the Request for Proposals setting forth the design concepts, proposed prices, and other conditions for the Work to be performed.
35. Radioactive Material: Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
36. Request for Proposals: The document prepared by or for Owner specifying and describing Owner's objectives and the procedure to be followed in preparing and submitting a Proposal and awarding a contract.
37. Resident Project Representative: The authorized representative of Owner who may be assigned to the Site or any part thereof.
38. Schedule of Values: A schedule prepared by Design/Builder and acceptable to Owner indicating that portion of the Contract Price to be paid for each major component of the Work.
39. Site: Lands or other areas designated in the Contract Documents as being furnished by Owner upon which Construction is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for use of Design/Builder.
40. Specifications: The part of the Contract Documents prepared by or for Design/Builder and approved by Owner consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

41. Subcontractor: An individual or entity other than a Supplier having a direct contract with Design/Builder or with any other Subcontractor for the performance of a part of the Work.
42. Submittal: A written or graphic document prepared by or for Design/Builder which is required by the Contract Documents to be submitted to Owner by Design/Builder. Submittals may include Drawings, Specifications, progress schedules, shop drawings, samples, cash flow projections, and Schedules of Values. Submittals other than Drawings and Specifications are not Contract Documents.
43. Substantial Completion: The time at which the Work (or a specified part) has progressed to the point where it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
44. Supplementary Conditions: The part of the Contract Documents which amends or supplements these General Conditions.
45. Supplier: A manufacturer, fabricator, supplier, distributor, materialman or vendor having a direct contract with Design/Builder or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Design/Builder or any Subcontractor.
46. Unit Price Work: Work to be paid for on the basis of unit prices.
47. Work: The entire design and construction or the various separately identifiable parts thereof required to be performed or furnished under the Contract Documents. Work includes and is the result of performing or furnishing Design Professional Services and Construction required by the Contract Documents.
48. Work Change Directive: A written directive to Design/Builder, issued on or after the Effective Date of the Agreement and signed by Owner ordering an addition, deletion or revision in the Work, or responding to differing site conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times, but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

- A. The words and terms discussed in Paragraph 1.02.B are not defined terms, but when used in the Contract Documents have the indicated meanings.

B. Intent of Certain Terms or Adjectives:

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.
2. The word "defective," when modifying the word "Construction" refers to Construction that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Owner's final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion) provided that the defect was not caused by Owner.
3. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
4. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials or equipment or equipment complete and ready for intended use.
5. The words "perform" or "provide" when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
6. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Design/Builder, "provide" is implied.
7. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with that meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 Delivery of Bonds

- A. When Design/Builder delivers the executed Agreements to Owner, Design/Builder shall also deliver to Owner such Bonds as Design/Builder may be required to furnish in accordance with Paragraph 5.01.A.
- B. Evidence of Insurance: Before any Work is started, Design/Builder and Owner shall each deliver to the other those certificates of insurance that Design/Builder and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Commencement of Contract Times; Notice to Proceed

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the Effective Date of the Agreement. Unless agreed to in writing by Owner and Design/Builder, the Contract Times will commence to run no later than the ninetieth day after the last day for receipt of the Proposal or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.03 Starting the Work

- A. Design/Builder shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.04 Before Starting the Work

- A. Design/Builder's Review of Conceptual Documents: Before undertaking the Work, Design/Builder shall carefully study and compare those Conceptual Documents prepared by Owner and check and verify pertinent figures therein and all applicable field measurements. Design/Builder shall promptly report in writing to Owner any conflict, error, ambiguity, or discrepancy which Design/Builder may discover and shall obtain a written interpretation or clarification from Owner before proceeding with any Work affected thereby; however, Design/Builder shall not be liable to Owner for failure to report any conflict, error, ambiguity, or discrepancy in the Conceptual Documents unless Design/Builder knew thereof.
- B. Preliminary Schedules: Within 10 days after commencement of the Contract Times (unless otherwise specified in the Contract Documents), Design/Builder shall submit the following to Owner for its timely review:
 - 1. A preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
 - 2. A preliminary schedule of Submittals which will list each required Submittal and the times for submitting, reviewing and processing each Submittal;
 - 3. A preliminary Schedule of Values for all of the Work which will include quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work; and

4. A preliminary cash flow projection estimating that portion of the Contract Price to be due during each month of performance.
- C. Evidence of Insurance: Before any Work at the Site is started, Design/Builder and Owner shall each deliver to the other, certificates of insurance as required by paragraph 5.03 which Design/Builder and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.05 Initial Conference

- A. Within twenty (20) days after the Contract Times start to run, Design/Builder will arrange a conference attended by Owner and Design/Builder and others as appropriate to establish a working understanding among the parties as to the Work and to discuss the design concepts, schedules referred to in Paragraph 2.04.B, procedures for handling Submittals, processing Applications for Payment, maintaining required records, items required pursuant to Paragraph 8.01.A.6 and other matters.
- B. At the initial conference Owner and Design/Builder each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.06 Initial Acceptance of Schedules

- A. At least ten (10) days before submission of the first Application for Payment (unless otherwise provided in the Contract Documents), Design/Builder will arrange a conference attended by Design/Builder, Owner and others as appropriate to review for acceptability the schedules submitted in accordance with Paragraph 2.04.B. Design/Builder shall have an additional ten (10) days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Design/Builder until the acceptable schedules are submitted to Owner.
 1. The progress schedule will be acceptable to Owner if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on Owner responsibility for the progress schedule, for sequencing, scheduling or progress of the Work nor interfere with nor relieve Design/Builder from Design/Builder's full responsibility therefor.
 2. Design/Builder's schedule of Submittals will be acceptable to Owner if it provides a workable arrangement for reviewing and processing the required Submittals.
 3. Design/Builder's Schedule of Values will be acceptable to Owner as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- B. It is the intent of the Contract Documents including but not limited to the Conceptual Documents, the Drawings, and the Specifications to describe a functionally complete Project (or part thereof) to be designed and constructed in accordance with the Contract Documents. Design/Builder will furnish or perform all labor, documentation, services, materials, and equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result whether or not specifically called, for at no additional cost to Owner.

3.02 Reference Standards

- A. Standards, Specifications, Codes, Laws or Regulations.
 - 1. Reference to standards, specifications, manuals or codes of any technical society, organization or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect on the Effective Date except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard, specification, manual, or code, or instruction of a Supplier, shall be effective to change the duties and responsibilities of Owner, Design/Builder, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to Owner or its officers, directors, members, partners, employees, agents, consultants, or subcontractors any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Resolving Discrepancies

- A. In the event of a discrepancy between the Conceptual Documents on the one hand and the Proposal or Drawings or Specifications on the other hand, the Conceptual Documents will control except when Owner has approved a Submittal.
- B. Except as otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

1. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
2. The provisions of any such Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:
1. Owner's approval of required Submittals (pursuant to Paragraph 6.17.B);
 2. A Work Change Directive;
 3. A Change Order;
 4. A Field Order.

3.05 Reuse of Documents

- A. All documents including Drawings and Specifications prepared or furnished by Design/Builder pursuant to this Agreement are for Design/Builder's own use, and Design/Builder shall retain an ownership and property interest therein whether or not the Project is completed. Owner may make and retain copies for information and reference in connection with the use and occupancy of the Project by Owner and others. However, such documents are not intended or represented to be suitable for reuse by Owner or others on extensions of the Project or on any other project. Any reuse or any continued use after any termination without written verification or adaptation by Design/Builder for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Design/Builder and Owner shall indemnify and hold harmless Design/Builder and Subcontractors from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such verification or adaptation will entitle Design/Builder to further compensation at rates to be agreed upon by Owner and Design/Builder.

3.06 Electronic Data

- A. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner to Design/Builder or Design/Builder to Owner that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files

will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; DIFFERING SITE CONDITIONS; REFERENCE POINTS; HAZARDOUS ENVIRONMENTAL CONDITIONS

4.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Design/Builder of any encumbrances or restrictions not of general application but specifically related to use of the Site which Design/Builder will have to comply in performing the Work. Unless otherwise provided in the Contract Documents, Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Design/Builder and Owner are unable to agree on entitlement to or the amount or extent of any adjustments in the Contract Price or the Contract Times as a result of any delay in Owner's furnishing the Site, Design/Builder may make a Claim therefor as provided in Article 9.
- B. Upon reasonable written request, Owner shall furnish Design/Builder with a current statement of record legal title and legal description of the lands upon which the Construction is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws or Regulations.
- C. Design/Builder shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Differing Site Conditions

- A. Design/Builder shall promptly, and before the conditions are disturbed, give a written notice to Owner of (i) subsurface or latent physical conditions at the Site which differ materially from those indicated in the Contract Documents, or (ii) unknown physical conditions at the Site, of an unusual nature, which differ materially from those

ordinarily encountered and generally recognized as inhering in work of the character called for by the Contract Documents.

- B. Owner will investigate the Site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Design/Builder's cost of, or the time required for, performing any part of the Work, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the Contract Price or Times modified in writing by Change Order in accordance with Article 9.
- C. No request by Design/Builder for an equitable adjustment under Paragraph 4.02 shall be allowed unless Design/Builder has given the written notice required; provided that the time prescribed in 9.03.A for giving written notice may be extended by Owner.
- D. The provisions of this Paragraph 4.02 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

4.03 Reference Points

- A. Design/Builder shall be responsible for laying out the Work and shall protect and preserve the reference points and property monuments established by Owner pursuant to Paragraph 8.01.A.6.e, and shall make no changes or relocations without the prior written approval of Owner. Design/Builder shall report to Owner whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 Hazardous Environmental Condition at Site

- A. Design/Builder will not be responsible for any Hazardous Environmental Condition encountered at the Site which was not identified in the Contract Documents to be within the scope of the Work. Design/Builder shall be responsible for materials creating a Hazardous Environmental Condition created by any materials brought to the Site by Design/Builder, Subcontractors, Suppliers or anyone else for whom Design/Builder is responsible.
- B. If Design/Builder encounters a Hazardous Environmental Condition, Design/Builder shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Construction in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16); and (iii) notify Owner (and thereafter confirm such notice in writing). Owner shall promptly determine the necessity of retaining a qualified expert to evaluate such condition or take corrective action, if any.
- C. Design/Builder shall not be required to resume Construction in connection with such Hazardous Environmental Condition or in any such affected area until after Owner has

obtained any required permits related thereto and delivered to Design/Builder written notice (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Construction, or (ii) specifying any special conditions under which such Construction may be resumed safely. If Owner and Design/Builder cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of such Construction stoppage or such special conditions under which Construction is agreed to be resumed by Design/Builder, either party may make a Claim therefor as provided in Article 9.

- D. If after receipt of such special written notice Design/Builder does not agree to resume Construction based on a reasonable belief it is unsafe, or does not agree to resume such Construction under such special conditions, then Owner may order such portion of the Work that is related to such Hazardous Environmental Condition to be deleted from the Work. If Owner and Design/Builder cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Article 9. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- E. To the fullest extent permitted by Laws or Regulations, Owner shall indemnify and hold harmless Design/Builder, Subcontractors, Suppliers and the officers, directors, partners, employees, agents, other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from such Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Contract Documents to be included in the scope of the Work, and (iii) was not created by Design/Builder or by anyone for whom Design/Builder is responsible. Nothing in this Paragraph 4.04.E shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- F. To the fullest extent permitted by Laws or Regulations, Design/Builder shall indemnify and hold harmless Owner, Owner's Consultant and the officers, directors, partners, employees, agents, other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from such Hazardous Environmental Condition created by Design/Builder or anyone for whom Design/Builder is responsible. Nothing in this Paragraph 4.04.F shall obligate Design/Builder to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

ARTICLE 5 – BONDS AND INSURANCE

5.01 Performance, Maintenance and Other Bonds

- A. Design/Builder shall furnish performance bond in an amount at least equal to the Contract Price as security for the faithful performance and maintenance of all Design/Builder's obligations to furnish, provide and pay for Work and related materials under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. Design/Builder shall also furnish such other Bonds as are required by the Contract Documents.
- B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.
- C. If the surety on any Bond furnished by Design/Builder is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B and 5.02, Design/Builder shall within twenty days thereafter substitute another Bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

- A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Design/Builder shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

- A. Design/Builder shall deliver to Owner, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured or loss payee) which Design/Builder is required to purchase and maintain.
- B. Owner shall deliver to Design/Builder, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other

evidence of insurance requested by Design/Builder or any other additional insured) which Owner is required to purchase and maintain.

- C. Failure of Owner to demand such certificates or other evidence of Design/Builder's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Design/Builder's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Design/Builder.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Design/Builder's liability under the indemnities granted to Owner and others in the Contract Documents.

5.04 Design/Builder's Insurance

- A. Design/Builder shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Design/Builder's performance of the Work and Design/Builder's other obligations under the Contract Documents, whether it is to be performed by Design/Builder, any Subcontractor or Supplier or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
 - 1. Claims under workers' compensation, disability benefits and other similar employee benefit acts;
 - 2. Claims based on the provision of professional services, including but not limited to the design services performed by Design/Builder, to be insured under a professional liability insurance policy or endorsement;
 - 3. Claims for damages because of bodily injury, occupational sickness or disease, or death of Design/Builder's employees;
 - 4. Claims for damages because of bodily injury, sickness or disease, or death of any person other than Design/Builder's employees;
 - 5. Claims for damages insured by reasonably available personal injury liability coverage which are sustained (i) by any person as a result of an offense directly or indirectly related to the employment of such person by Design/Builder, or (ii) by any other person for any other reason;
 - 6. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

7. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by paragraph 5.04.A shall:
1. With respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds Owner and Owner's Consultants and any other persons or entities indicated in the Supplementary Conditions (subject to any customary exclusion in respect of professional liability), all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, and employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
 2. Include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
 3. Include contractual liability insurance covering Design/Builder's indemnity obligations under Paragraphs 6.11 and 6.21;
 4. Contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days' prior written notice has been given to Owner and each other additional insured indicated in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Design/Builder pursuant to Paragraph 5.03 will so provide);
 5. Remain in effect at least until final payment and at all times thereafter when Design/Builder may be correcting, removing or replacing defective Construction in accordance with Paragraphs 12.06 and 12.07; and
 6. Include completed operations coverage:
 - a. Such insurance shall remain in effect for two years after final payment.
 - b. Design/Builder shall furnish Owner and each other additional insured indicated in the Supplementary Conditions to whom a certificate of insurance has been issued evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 Owner's Liability Insurance

- A. In addition to the insurance required to be provided by Design/Builder under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense

Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

- A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Construction at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws or Regulations). This insurance will:
1. Include the interests of Owner, Owner's Consultant, Design/Builder, Subcontractors, and any other individuals or entities indicated in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;
 2. Be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss and damage to the Construction, temporary buildings, falsework, and all materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws or Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
 3. Include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 4. Cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Construction, provided that such materials and equipment have been included in an Application for Payment approved by Owner;
 5. Allow for partial utilization by Owner of the Work;
 6. Include testing and start-up; and
 7. Be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner and Design/Builder with thirty days' written notice to each other loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws or Regulations which will include the interests of Owner, Owner's Consultants, Design/Builder, Subcontractors, and any other individuals or entities indicated in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.

- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained by Owner in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days' prior written notice has been given to Design/Builder and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance to protect the interests of Design/Builder, Subcontractors, Suppliers, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Design/Builder, Subcontractor, or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If Design/Builder requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Design/Builder by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Design/Builder whether or not such other insurance has been procured by Owner.

5.07 Waiver of Rights

- A. Owner and Design/Builder intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Owner's Consultant, Design/Builder, Subcontractors, Suppliers, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Design/Builder waive all rights against each other and their respective officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Owner's Consultant, Subcontractors, Suppliers, and all other individuals or entities identified in the Supplementary Conditions as insureds or loss payees under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

- B. Owner waives all rights against Design/Builder, Subcontractors, and Suppliers and the officers, directors, members, employees and agents of any of them for:
 - 1. Loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property caused by, arising out of or resulting from fire or other peril whether or not insured by Owner; and
 - 2. Loss or damage to the completed Project or any part thereof caused by, arising out of or resulting from fire or other insured peril or cause or loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 13.06, after Substantial Completion pursuant to Paragraph 13.05, or after final payment pursuant to Paragraph 13.08.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Design/Builder, Subcontractors, Owner's Consultant, and the officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached the damaged Construction shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order.
- B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

- A. If either Owner or Design/Builder has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of their not complying with the Contract Documents, the objecting party shall so notify the other party in writing

within ten days after receipt of the certificates (or other evidence requested) required by Paragraph 2.04.C. Owner and Design/Builder shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If, either party does not purchase, or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was supposed to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurance

- A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 13.06, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 – DESIGN/BUILDER'S RESPONSIBILITIES

6.01 Design Professional Services

- A. Standard of Care: The standard of care for all Design Professional Services performed or furnished by Design/Builder under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar conditions at the same time and in the same locality.
- B. Preliminary Design Phase: After the Contract Times commence to run, Design/Builder shall:
 - 1. Consult with Owner to understand Owner's requirements for the Project and review available data;
 - 2. Advise Owner as to the necessity of Owner's providing or obtaining from others additional reports, data, or services of the types provided in Paragraph 8.01.A.6.a-g and assist Owner in obtaining such reports, data, or services;
 - 3. Identify and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by Design/Builder with whom consultation is to be undertaken in connection with the Project;

4. On the basis of the Conceptual Documents and Design/Builder's Proposal, prepare preliminary design documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project;
5. Furnish the preliminary design documents to and review them with Owner within the times indicated in the schedules described in Paragraphs 2.06.A.1 and 2.06.A.2; and
6. Identify any variations in the preliminary design documents from the Contract Documents in accordance with 6.17.B.

C. Final Design Phase:

After written acceptance by Owner of the preliminary design phase documents Design/Builder shall:

1. On the basis of the accepted Preliminary Design Phase documents, prepare final Drawings showing the scope, extent, and character of the Construction to be performed and furnished by Design/Builder and Specifications (which will be prepared, where appropriate, in general conformance with the format recommended by the Construction Specifications Institute);
2. Provide technical criteria, written descriptions, and design data required for obtaining approvals of such governmental authorities as have jurisdiction to review or approve the final design of the Project, and assist Owner in consultations with appropriate authorities;
3. Furnish the above documents, Drawings, and Specifications to and review them with Owner within the times indicated in the schedules described in Paragraphs 2.06.A.1 and 2.06.A.2; and
4. Identify any deviations from other Contract Documents in accordance with Paragraph 6.17.B.

6.02 Supervision and Superintendence of Construction

- A. Design/Builder shall supervise, inspect, and direct the Construction competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to provide the Construction in accordance with the Contract Documents. Design/Builder shall be solely responsible for the means, methods, techniques, sequences, and procedures of Construction. Design/Builder shall be responsible to see that the completed Construction complies fully with the Contract Documents and shall keep Owner advised as to the quality and progress of the Construction.

- B. At all times during the progress of Construction, the Design/Builder shall assign a competent resident superintendent who shall not be replaced without written notice to Owner except under extraordinary circumstances.

6.03 Labor, Working Hours

- A. Design/Builder shall provide competent, suitably qualified personnel to perform the Work as required by the Contract Documents. Design/Builder shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Construction at the Site shall be performed during between 7:00am and 3:30pm, and Design/Builder will not permit overtime work or the performance of Construction on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld).

6.04 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Design/Builder shall furnish or cause to be furnished and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified by Owner, or in the Drawings or Specifications, or if not specified shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Contract Documents shall expressly run to the benefit of Owner. If required by Owner, Design/Builder shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.
- D. There shall be no storage of material on project site unless Design/Builder receives written authorization from property owner.

6.05 Progress Schedule

- A. Design/Builder shall adhere to the progress schedule established in accordance with Paragraph 2.06.A as it may be adjusted from time to time as provided below:

1. Design/Builder shall submit to Owner for acceptance proposed adjustments in the progress schedule that will not change the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect.
2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 11.02. Such adjustments may only be made by a Change Order.

6.06 Concerning Subcontractors, Suppliers, and Others

- A. Design/Builder shall not employ any Subcontractor, Supplier, or other individual or entity against whom Owner may have reasonable objection. Design/Builder shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Design/Builder has reasonable objection.
- B. Design/Builder shall be fully responsible to Owner for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Design/Builder is responsible for Design/Builder's own acts and omissions. Nothing in the Contract Documents:
 1. Shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner and any such Subcontractor, Supplier, or other individual or entity;
 2. Shall create any obligation on the part of Owner to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws or Regulations.
- C. Design/Builder shall be solely responsible for scheduling and coordinating Subcontractors, Suppliers, and other individuals and entities performing or furnishing any of the Work under a direct or indirect contract with Design/Builder.
- D. Design/Builder shall require all Subcontractors, Suppliers, and such other individuals and entities performing or furnishing any of the Work to communicate with the Owner through Design/Builder.
- E. All Work performed for Design/Builder by a Subcontractor or Supplier will be pursuant to an appropriate Design Subagreement or Construction Subagreement between Design/Builder and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Design/Builder and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Design/Builder, Owner's Consultant, and all

other loss payees (and their officers, directors, members, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Design/Builder will obtain the same.

6.07 Patent Fees and Royalties

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

6.08 Permits

- A. Unless otherwise provided in the Contract Documents, Design/Builder shall obtain and pay for all necessary permits, licenses, and approvals of governmental authorities having jurisdiction over the Work. Owner shall assist Design/Builder, when necessary, in obtaining such permits, licenses and approvals. Design/Builder shall pay all governmental charges and inspection fees necessary for the performance of the Work,

which are applicable on the last day for receipt of Proposals. Design/Builder shall pay all charges of utility owners for connections for providing permanent service to the Work, and Owner shall pay all charges of such utility owners for capital costs related thereto.

6.09 Laws or Regulations

- A. Design/Builder shall give all notices required by and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, Owner shall not be responsible for monitoring Design/Builder's compliance with any Laws or Regulations.
- B. If Design/Builder performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Design/Builder shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work.
- C. Changes in Laws or Regulations not known on the Effective Date having an effect on the cost or time of performance may be the subject of a change in Contract Price or Contract Times.

6.10 Taxes

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

6.11 Use of Site and Other Areas

- A. Limitation on Use of Site and Other Areas.
 - 1. Design/Builder shall confine construction equipment, the authorized storage of materials and equipment, and the operations of construction workers to the Site and other areas permitted by Laws or Regulations and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Design/Builder shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work.
 - 2. Should any claim be made by any such owner or occupant because of the performance of Work, Design/Builder shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws or Regulations, Design/Builder shall indemnify and hold harmless Owner, Owner's Consultants and anyone directly or indirectly employed by any of them from and against all claims, costs, losses and damages (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration or other dispute resolution costs) arising out of or resulting from any claim brought by any such owner or occupant against Owner, or any other party indemnified hereunder to the extent caused by or based upon Design/Builder's performance of the Construction.
 4. There shall be no storage of material on project site, unless written authorization from property owner
- B. Removal of Debris: During the performance of the Construction, Design/Builder shall keep the premises free from accumulations of waste materials, rubbish, and other debris resulting from the Construction. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws or Regulations.
 - C. Cleaning: Prior to Substantial Completion, Design/Builder shall clean the Site and make it ready for utilization by Owner. At completion of Construction, Design/Builder shall remove all tools, appliances, construction equipment, temporary construction and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
 - D. Loading Structures: Design/Builder shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Design/Builder subject any part of the Construction or adjacent property to stresses or pressures that will endanger it.
 - E. If Contractor encounters unknown or atypical surface or subsurface conditions, contact Owner immediately.

6.12 Record Documents

- A. Design/Builder shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Field Orders and Work Change Directives in good order and annotated to show all changes made during performance of the Work. These record documents together with all approved Submittals will be available to Owner for reference. Upon completion of the Work, these record documents and Submittals will be delivered to Owner.

6.13 Safety and Protection

- A. Design/Builder shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety

Laws and Regulations. Design/Builder shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

1. All persons on the Site or who may be affected by the Work;
 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. Other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Design/Builder shall comply with applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Design/Builder shall provide a minimum of 48 hour notice to owners of adjacent property and of underground facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. Design/Builder shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Design/Builder shall inform Owner of the specific requirements of Design/Builder's safety program with which Owner and its employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.1, 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Design/Builder, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Design/Builder.
- F. Design/Builder's duties and responsibilities for safety and for protection of the construction shall continue until such time as all the Work is completed and Owner has issued a notice to Design/Builder in accordance with Paragraph 13.08.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

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

6.15 Hazard Communication Programs

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

6.16 Emergencies

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

6.17 Submittals

- A. Owner will review and approve Submittals in accordance with the schedule of required Submittals accepted by Owner as required by Paragraph 2.06.A. Owner's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the construction, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Owner's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- B. Owner's review and approval of Submittals shall not relieve Design/Builder from responsibility for any variation from the requirements of the Contract Documents, unless Design/Builder has in a separate written communication at the time of submission called Owner's attention to each such variation and Owner has given written approval.
- C. Construction prior to Owner's review and approval of any required Submittal will be at the sole risk of Design/Builder.

6.18 Continuing the Work

- A. Design/Builder shall continue the Work and adhere to the progress schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as Design/Builder and Owner may otherwise agree in writing.

6.19 Post-Construction Phase

- A. Design/Builder shall:

1. Provide assistance in connection with the start-up, testing, refining and adjusting of any equipment or system.
2. Assist Owner in training staff to operate and maintain the Work.
3. Assist Owner in developing systems and procedures for control of the operation and maintenance of and record keeping for the Work.

6.20 Design/Builder's General Warranty and Guarantee

- A. Design/Builder warrants and guarantees to Owner that all Construction will be in accordance with the Contract Documents and will not be defective.

- B. Design/Builder's warranty and guarantee hereunder excludes defects or damage caused by:

1. Abuse, modification or improper maintenance or operation by persons other than Design/Builder, Subcontractors, or Suppliers or any other individual for whom Design/Builder is responsible; or
2. Normal wear and tear under normal usage.

- C. Design/Builder's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, or a release of Design/Builder's obligation to perform the Work in accordance with the Contract Documents:

1. Observations by Owner;
2. The making of any progress or final payment;
3. The issuance of a certificate of Substantial Completion;
4. Use or occupancy of the Work or any part thereof by Owner;
5. Any review and approval of a Submittal;

6. Any inspection, test, or approval by others; or
7. Any correction of defective Construction by Owner.

6.21 Indemnification

- A. To the fullest extent permitted by Laws or Regulations, Design/Builder shall indemnify and hold harmless Owner, Owner's Consultants, and the officers, members, directors, partners, employees, agents, other consultants and subcontractors of each from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself, including the loss of use resulting therefrom) but only to the extent caused by any negligent act or omission of Design/Builder, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform or furnish any of the Work.
- B. In any and all claims against Owner, Owner's Consultant, or any of their respective consultants, agents, officers, members, directors, partners or employees by any employee (or the survivor or personal representative of such employee) of Design/Builder, any Subcontractor, any Supplier, any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.21.A shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Design/Builder or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts or other employee benefit acts.
- C. The indemnification obligations of Design/Builder under Paragraph 6.21.A shall not extend to the liability of Owner's Consultant, and their officers, directors, members, partners, employees, agents, other consultants, and subcontractors arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, designs, or specifications.

ARTICLE 7 – OTHER CONSTRUCTION

7.01 Related Work at Site

- A. Owner may perform other Work related to the Project at the Site with Owner's employees or through other direct contracts thereof, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. Written notice thereof will be given to Design/Builder prior to starting any such other work; and
 2. if Owner and Design/Builder are unable to agree on entitlement to or on the extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, Design/Builder may make a Claim therefor as provided in Article 9.
- B. Design/Builder shall afford each other contractor who is a party to such a direct contract and each utility owner (and Owner, if Owner is performing the additional work with Owner's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and authorized storage of materials and equipment and the execution of such other work and shall properly connect and coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, Design/Builder shall do all cutting, fitting, and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. Design/Builder shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Design/Builder may cut or alter others' work with the written consent of Owner and the others whose work will be affected. The duties and responsibilities of Design/Builder under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Design/Builder in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Design/Builder's Work depends upon work performed or services provided by others under this Article 7, Design/Builder shall inspect such other work and appropriate instruments of service and promptly report to Owner in writing any delays, defects or deficiencies in such other work or services that render it unavailable or unsuitable for the proper execution and results of Design/Builder's Work. Design/Builder's failure so to report will constitute an acceptance of such other work as fit and proper for integration with Design/Builder's Work except for latent or nonapparent defects and deficiencies in such other work.

7.02 Coordination

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
1. The individual or entity who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified;
 2. The specific matters to be covered by such authority and responsibility will be itemized; and
 3. The extent of such authority and responsibilities will be provided.

- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility in respect of such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Design/Builder for the reasonable direct delay and disruption costs incurred by Design/Builder as a result of the other contractor's wrongful actions or inactions.
- C. Design/Builder shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Design/Builder's wrongful action or inactions.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

8.01 General

- A. Owner shall do the following in a timely manner so as not to delay the services of Design/Builder:
 - 1. Provide such legal services as Owner may require with regard to legal issues pertaining to the Project including any that may be raised by Design/Builder;
 - 2. If requested in writing by Design/Builder, furnish reasonable evidence satisfactory to Design/Builder that sufficient funds are available and committed for the entire cost of the Project. Unless such reasonable evidence is furnished, Design/Builder is not required to commence or continue any Work, or may, if such evidence is not presented within a reasonable time, stop Work upon 15 days notice to the Owner;
 - 3. Make payments to Design/Builder promptly when they are due as provided in Paragraph 13.03 and 13.08;
 - 4. Furnish the Site as set forth in Paragraph 4.01.A;
 - 5. Furnish to Design/Builder, as required for performance of Design/Builder's Services the following, all of which Design/Builder may use and rely upon in performing services under this Agreement:
 - a. Environmental assessment and impact statements;
 - b. Property, boundary, easement, right-of-way, topographic, and utility surveys;
 - c. Property descriptions;

- d. Zoning, deed, and other land use restrictions;
 - e. Engineering surveys to establish reference points for design and construction which in Owner's judgment are necessary to enable Design/Builder to proceed with the Work;
 - f. Assistance to Design/Builder in filing documents required to obtain necessary permits, licenses, and approvals of governmental authorities having jurisdiction over the Project;
 - g. Permits, licenses, and approvals of government authorities Owner is specifically required to obtain by the Contract Documents; and
 - h. Identify all reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site, all drawings known to owner of physical conditions relating to existing surface or subsurface structures at the Site, and any information or data known to Owner concerning underground facilities at the Site.
6. Review Submittals subject to Owner review pursuant to Paragraph 6.17.A;
- a. Environmental assessment and impact statements;
 - b. Property, boundary, easement, right-of-way, topographic, and utility surveys;
 - c. Property descriptions;
 - d. Zoning, deed, and other land use restrictions;
 - e. Engineering surveys to establish reference points for design and construction which in Owner's judgment are necessary to enable Design/Builder to proceed with the Work;
 - f. Assistance to Design/Builder in filing documents required to obtain necessary permits, licenses, and approvals of governmental authorities having jurisdiction over the Project;
 - g. Permits, licenses, and approvals of government authorities Owner is specifically required to obtain by the Contract Documents7. Provide information known to Owner relating to the presence of materials and substances at the Site which could create a Hazardous Environmental Condition.

8.02 Insurance

- A. Owner's responsibilities in respect of purchasing and maintaining liability and property insurance are set forth in Article 5.

8.03 Limitations on Owner's Responsibilities

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

8.04 Undisclosed Hazardous Environmental Condition

- A. Owner's responsibility in respect of undisclosed Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Materials uncovered or revealed at the Site is set forth in Paragraph 4.04.

8.05 Resident Project Representation

- A. Owner may furnish a Resident Project Representative to observe the performance of Construction. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions.

8.06 Owner's Consultant

- A. Owner's Consultant, if any, has no duties, responsibilities, or authorities with respect to Design/Builder, unless so provided in the Supplementary Conditions.

8.07 Compliance with Safety Program

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Design/Builder's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

ARTICLE 9 – CHANGES IN THE WORK; CLAIMS

9.01 Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work, including field orders within the general scope of the Contract by a Change Order or a Work Change Directive. Upon receipt of any such document, Design/Builder shall promptly

proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

9.02 Unauthorized Changes in the Work

- A. Design/Builder shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Construction as provided in Paragraph 12.04.

9.03 Claims

- A. Notice: If Owner and Design/Builder are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or an adjustment of the Contract Times that should be allowed as a result of any order of Owner pursuant to Paragraph 9.01.A or other occurrence for which the Contract Documents provide that such adjustment(s) may be made, a Claim may be made therefor. Written notice of intent to make such a Claim shall be submitted to the other party promptly and in no event more than 15 days after the start of the occurrence or event giving rise to the Claim.
- B. Documentation: Substantiating documentation shall be submitted by the claiming party within 30 days after delivery of the notice required by Paragraph 9.03.A.
- C. Decision: The other party shall render a decision on the Claim no more than 30 days after the receipt of the substantiating documentation required by Paragraph 9.03.B. This decision will be final and binding unless the claiming party gives notice of intention to exercise its rights under Article 15 within 30 days of receipt of the decision and exercises such rights within 30 days of giving the notice of intent.
- D. Time Limit Extension: The time limits of Paragraphs 9.03.B and 9.03.C may be extended by mutual agreement.

9.04 Execution of Change Orders

- A. Owner and Design/Builder shall execute appropriate Change Orders covering:
 - 1. Changes in the Work which are (i) ordered by Owner pursuant to Paragraph 9.01, (ii) required because of acceptance of defective Construction under Paragraph 12.08 or Owner's correction of defective Work under Paragraph 12.09 or (iii) agreed to by the parties; and
 - 2. Changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive.

9.05 Notice to Sureties

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

ARTICLE 10 – COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

10.01 Cost of the Work

- A. Costs Included: The term Cost of the Work means the sum of all costs necessarily incurred and paid by Design/Builder in the proper performance of the Work. When the value of Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Design/Builder will be only those additional or incremental costs required because of the change of the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, and shall not include any of the costs itemized in Paragraph 10.01.B, and shall include only the following items:
 1. Payroll costs for employees in the direct employ of Design/Builder in the performance of the Work under schedules of job classifications agreed upon by Owner and Design/Builder.
 - a. Such employees shall include without limitation superintendents, foremen, and other personnel employed full-time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by Owner.
 - b. Such employees shall also include engineers, engineering technicians, architects, and others providing Design Professional Services. For purposes of this Paragraph 10.01.A.1, Design/Builder shall be entitled to payment for such employees an amount equal to salary costs times a factor, both as designated in the Agreement, for all services performed or furnished by such employees engaged on the Project.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Design/Builder unless Owner deposits funds with Design/Builder with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds shall accrue to Owner, and Design/Builder shall make provisions so that they may be obtained.
3. Payments made by Design/Builder to Subcontractors (excluding payments for Design Professional Services pursuant to Paragraph 10.01.A.4) for Work performed or furnished by Subcontractors. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Design/Builder's Cost of the Work and fee.
4. Payments made by Design/Builder for Design Professional Services provided or furnished under a Design Subagreement.
5. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
6. Supplemental costs including the following items:
 - a. The proportion of necessary transportation, travel and subsistence expenses of Design/Builder's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the Site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Design/Builder.
 - c. Rentals of all construction or engineering equipment and machinery and the parts thereof whether rented from Design/Builder or others in accordance with rental agreements approved by Owner, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Design/Builder is liable, imposed by Laws or Regulations.

- e. Deposits lost for causes other than negligence of Design/Builder, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses, damages, and related expenses caused by damage to the Work not compensated by insurance or otherwise, sustained by Design/Builder in connection with the furnishing and performance of the Work provided they have resulted from causes other than the negligence of Design/Builder, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Design/Builder's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. Cost of premiums for all Bonds and insurance Design/Builder is required by the Contract Documents to purchase and maintain.

B. Costs Excluded:

The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Design/Builder's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Design/Builder whether at the Site or in Design/Builder's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 10.01.A.1, all of which are to be considered administrative costs covered by the Design/Builder's fee.
2. Expenses of Design/Builder's principal and branch offices other than Design/Builder's office at the Site.
3. Any part of Design/Builder's capital expenses, including interest on Design/Builder's capital employed for the Work and charges against Design/Builder for delinquent payments.

4. Costs due to the negligence of Design/Builder, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 10.01.A.
- C. Design/Builder's Fee: When all the Work is performed on the basis of cost-plus, Design/Builder's fee shall be as set forth in the Agreement. When the value of the Work covered by a Change Order is determined on the basis of Cost of the Work, Design/Builder's fee shall be determined as set forth in Paragraph 11.01.C.
- D. Documentation: Whenever the cost of any Work is to be determined pursuant to Paragraph 10.01.A and 10.01.B, Design/Builder will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Owner an itemized cost breakdown together with supporting data.

10.02 Cash Allowances

- A. The Contract Price includes all allowances so named in the Contract Documents. Design/Builder shall cause the Work so covered to be performed for such sums as may be acceptable to Owner. Design/Builder agrees that:
1. The allowances include the cost to Design/Builder (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Except as set forth in the Contract Documents, Design/Builder's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- B. Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due Design/Builder on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

10.03 Unit Prices

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all of Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed

and are solely for the purpose of comparison of Proposals and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Design/Builder will be made by Owner.

- B. Each unit price will be deemed to include an amount considered by Design/Builder to be adequate to cover Design/Builder's overhead and profit for each separately identified item.
- C. Design/Builder or Owner may make a Claim for an adjustment in the Contract Price in accordance with Article 9 if:
 - 1. the quantity of any item of Unit Price Work performed by Design/Builder differs materially and significantly from the estimated quantity of such item indicated in the Contract Documents;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Design/Builder believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes it is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 11 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

11.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice delivered by the party making the Claim to the other party promptly in accordance with Paragraph 9.03.A.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 10.03); or
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.01.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 11.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 10.01) plus a Design/Builder's Fee for overhead and profit (determined as provided in Paragraph 11.01.C).

C. Design/Builder's Fee: The Design/Builder's fee for overhead and profit on Change Orders shall be determined as follows:

1. A mutually acceptable fixed fee; or
2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 10.01.A.1.a and 10.01.A.2, the Design/Builder's fee shall be 15 percent;
 - b. For costs incurred under Paragraph 10.01.A.3 10.01.A.4, 10.01.A.5 and 10.01.A.6, the Design/Builder's fee shall be five percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.1 and 11.01.C.2.a is that the Subcontractor who actually performs or furnishes Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 10.01.A.1 and 10.01.A.2 and that any higher tier Subcontractor and Design/Builder will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
 - d. The amount of credit to be allowed by Design/Builder to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Design/Builder's fee by an amount equal to five percent of such net decrease; and
 - e. When both additions and credits are involved in any one change, the adjustment in Design/Builder's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.01.C.2.a through 11.01.C.2.d, inclusive.

11.02 Change of Contract Times

- A. The Contract Times (or Milestones) may only be changed by a Change Order. Any Claim for an adjustment of the Contract Times (or Milestones) shall be based on written notice pursuant to Paragraph 9.03.A.
- B. Delays Beyond Design/Builder's Control: Where Design/Builder is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of Design/Builder, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 11.02.A. Delays beyond the control of Design/Builder shall include, but not be limited to, acts or neglect by Owner, governmental agencies, acts or neglect of utility owners or other contractors performing

other construction work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

- C. If Owner or other contractor or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Design/Builder shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Design/Builder's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Design/Builder's ability to complete the Work within the Contract Times.
- D. If Design/Builder is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Design/Builder, then Design/Builder shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Design/Builder's ability to complete the Work within the Contract Times. Such an adjustment shall be Design/Builder's sole and exclusive remedy for the delays described in this Paragraph 11.02.C.
- E. Owner and Owner's Consultant shall not be liable to Design/Builder for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Design/Builder on or in connection with any other project or anticipated project.
- F. Design/Builder shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Design/Builder. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Design/Builder.

ARTICLE 12 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE CONSTRUCTION

12.01 Notice of Defects

- A. Owner shall give Design/Builder prompt written notice of all defective Construction of which Owner has actual knowledge. All defective Construction may be rejected, corrected or accepted as provided in this Article 12.

12.02 Access to Construction

- A. Owner, Owner's Consultants, other representatives and personnel of Owner, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the Site and the Construction at reasonable times for their observation, inspecting, and testing. Design/Builder shall provide them proper and safe

conditions for such access and advise them of Design/Builder's Site safety procedures and programs so that they may comply therewith as applicable.

12.03 Tests and Inspections

- A. If the Contract Documents or Laws or Regulations of any public body having jurisdiction require any part of the Construction specifically to be inspected, tested or approved, Design/Builder shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, pay all costs in connection therewith, and furnish Owner the required certificates of inspection or approval. Design/ Builder shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's acceptance of materials or equipment to be incorporated in the Work or of materials, mix designs, or equipment submitted for approval prior to Design/Builder's purchase thereof for incorporation in the Work.
- B. Design/Builder shall give Owner reasonable notice of the planned schedule for all required inspections, tests, or approvals.
- C. If any Construction (or the construction work of others) that is required to be inspected, tested, or approved is covered by Design/Builder without written concurrence of Owner, then Contractor shall, if requested by Owner, uncover such Construction for observation.
- D. Uncovering Construction shall be at Design/Builder's expense unless Design/ Builder has given Owner timely notice of Design/Builder's intention to cover the same and Owner has not acted with reasonable promptness in response to such notice.

12.04 Uncovering Construction

- A. If any Construction is covered contrary to the written request of Owner, it must, if requested by Owner, be uncovered for Owner's observation and recovered at Design/Builder's expense.
- B. If Owner considers it necessary or advisable that covered Construction be observed by Owner or inspected or tested by others, Design/Builder, at Owner's request, shall uncover, expose or otherwise make available for observation, inspection or testing as Owner may require, that portion of the Construction in question, furnishing all necessary labor, material and equipment. If it is found that such Construction is defective, Design/Builder shall pay all costs and damages caused by or resulting from such uncovering, exposure, observation, inspection and testing and of satisfactory replacement or reconstruction, (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals, all court or arbitration or other dispute resolution costs, and all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, Owner may make a Claim thereof

as provided in Article 9. If, however, such Construction is not found to be defective, Design/Builder shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement and reconstruction, only if Owner was given the required notice and did not observe. If the parties are unable to agree as to the amount or extent thereof, Design/Builder may make a Claim therefor as provided in Article 9.

12.05 Owner May Stop Construction

- A. If Construction is defective, or Design/Builder fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform Construction in such a way that the completed Construction will conform to the Contract Documents, Owner may order Design/Builder to stop Construction or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop Construction will not give rise to any duty on the part of Owner to exercise this right for the benefit of Design/Builder or any other party.

12.06 Correction or Removal of Defective Construction

- A. Owner will have authority to disapprove or reject defective Construction and will have authority to require special inspection or testing of the Construction whether or not the Construction is fabricated, installed or completed. If required by Owner, Design/Builder shall promptly, as directed, either correct all defective Construction, whether or not fabricated, installed or completed, or, if the Construction has been rejected by Owner, remove it from the Site and replace it with non-defective Construction. Design/Builder shall bear all direct, indirect, and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and all court, arbitration, or other dispute resolution costs) arising out of or relating to such correction or removal.

12.07 Correction Period

- A. If within one (1) year after the date of Substantial Completion of the entire Work or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Construction is found to be defective, Design/Builder shall promptly, without cost to Owner and in accordance with Owner's written instructions, (i) correct such defective Construction, or, if it has been rejected by Owner, remove it from the Site and replace it with Construction that is not defective, and (ii) satisfactorily correct or remove and replace any damage to other Construction or the work of others resulting therefrom. If Design/Builder does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Construction corrected or the rejected Construction removed and replaced, and all costs, losses, and damages caused by or resulting from such removal and replacement

(including but not limited to all fees and charges of engineers, architects, attorneys and other professionals, all court or arbitration or other dispute resolution costs, and all costs of repair or replacement of work of others) will be paid by Design/Builder.

- B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Conceptual Documents.
- C. Where defective Construction (and damage to other Construction resulting therefrom) has been corrected, removed or replaced under this Paragraph 12.07, the correction period hereunder with respect to such Construction will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

12.08 Acceptance of Defective Construction

- A. If, instead of requiring correction or removal and replacement of defective Construction, Owner prefers to accept it, Owner may do so. Design/Builder shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Construction. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents, and Owner shall be entitled to an appropriate decrease in the Contract Price reflecting the diminished value of the Construction so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Article 9. If the acceptance occurs after final payment, an appropriate amount will be paid by Design/Builder to Owner.

12.09 Owner May Correct Defective Construction

- A. If Design/Builder fails within a reasonable time after written notice from Owner to correct defective Construction or to remove and replace rejected Construction as required by Owner in accordance with Paragraphs 12.06.A or 12.07.A, or if Design/Builder fails to perform the Construction in accordance with the Contract Documents, or if Design/Builder fails to comply with any other provision of the Contract Documents, Owner may, after seven days' written notice to Design/Builder, correct and remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 12.09 Owner shall proceed expeditiously. In connection with such corrective and remedial action, Owner may exclude Design/Builder from all or part of the Site, take possession of all or part of the Construction, and suspend Design/Builder's services related thereto, take possession of Design/Builder's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Construction all materials and equipment stored at the Site or for which Owner has paid Design/Builder but which are stored elsewhere. Design/Builder

shall allow Owner, Owner's Consultant, Owner's representatives, agents, employees, and other contractors access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

- C. All costs, losses, and damages (included but not limited to fees and charges of engineers, architects, attorneys and other professionals, all court or arbitration or other dispute resolution costs and all costs of repair or replacement of work of others) incurred or sustained by Owner in exercising such rights and remedies under this Paragraph 12.09 will be charged against Design/Builder and a Change Order will be issued incorporating the necessary revisions in the Contract Documents, and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim thereof as provided in Article 9.
- D. Design/Builder shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 12.09.

ARTICLE 13 – PAYMENTS TO DESIGN/BUILDER AND COMPLETION

13.01 Schedule of Values

- A. The Schedule of Values established as provided in Paragraph 2.06.A will serve as the basis for progress payments. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.02 Application for Progress Payment

- A. On or about the date established in the Agreement for submission of each application for progress payment (but not more often than once a month), Design/Builder shall submit to Owner for review an Application for Payment filled out and signed by Design/Builder covering the Work completed as of the date indicated on the Application and accompanied by supporting documentation as required by the Contract Documents.
- B. Beginning with the second Application for Payment, each Application shall include an affidavit of Design/Builder stating that all previous progress payments received on account of the Work have been applied on account to discharge Design/Builder's legitimate obligations associated with prior Applications for Payment.
- C. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

13.03 Progress Payments

- A. Procedure: Progress payments shall be made by the Owner to the Design/Builder according to the following procedure:
1. Owner will, within ten (10) days of receipt of each Application for Payment, either indicate in writing its acceptance of the Application and state that the Application is being processed for payment, or return the Application to Design/Builder indicating in writing its reasons for refusing to accept the Application. Not more than ten days after accepting such Application the amount will become due and when due will be paid by Owner to Design/Builder.
 2. If Owner should fail to pay Design/Builder at the time the payment of any amount becomes due, then Design/Builder may, at any time thereafter, upon serving written notice that he will stop the Work within seven days after receipt of the notice by Owner, and after such seven day period, stop the Work until payment of the amount owing has been received. Written notice shall be deemed to have been duly served if sent by certified mail to the last known business address of Owner.
 3. Payments due but unpaid shall bear interest at the rate specified in the Agreement.
 4. No Progress Payment nor any partial or entire use or occupancy of the Project by Owner shall constitute an acceptance of any Work not in accordance with the Contract Documents.
- B. Reduction in or Refusal to Make Payment: Owner may refuse to make the whole or any part of any such payment, or because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any previous payment, to the extent that is reasonably necessary to protect Owner from loss because:
1. The Construction is defective, or completed Construction has been damaged requiring correction or replacement; or
 2. The Contract Price has been reduced by Change Order; or
 3. Owner has been required to correct defective Construction or complete Work in accordance with Paragraph 12.09.A; or
 4. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.A; or
 5. Claims have been made against Owner on account of Design/Builder's performance or furnishing of the Work; or
 6. Liens have been filed in connection with the Work, except where Design/Builder has delivered a specific Bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or

7. There are other items entitling Owner to a set off against the amount for which application is made.
- C. If Owner refuses to make payment of the full amount requested by Design/Builder, Owner must give Design/Builder immediate written notice stating the reasons for such action and promptly pay Design/Builder any amount remaining after deduction of the amount withheld. Owner shall promptly pay Design/Builder the amount withheld, or any adjustment thereto agreed to when Design/Builder remedies the reason for such action.
- D. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.04.A and subject to interest as provided in the Agreement.

13.04 Design/Builder's Warranty of Title

- A. Design/Builder warrants and guarantees that title to all Construction, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

13.05 Substantial Completion

- A. When Design/Builder considers the Work ready for its intended use Design/Builder shall notify Owner in writing that the Work is substantially complete (except for items specifically listed by Design/Builder as incomplete) and request that Owner issue a certificate of Substantial Completion. Promptly thereafter, Owner and Design/Builder shall make an inspection of the Work to determine the status of completion. If Owner does not consider the Work substantially complete, Owner will notify Design/Builder in writing giving the reasons therefor. If Owner considers the Work substantially complete, Owner will prepare and deliver to Design/Builder a certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment. At the time of delivery of the certificate of Substantial Completion Owner will deliver to Design/Builder a written determination as to division of responsibilities pending final payment between Owner and Design/Builder with respect to security, operation, safety, protection of Construction, maintenance, heat, utilities, insurance and warranties and guarantees.
- B. Owner will have the right to exclude Design/Builder from the Site after the date of Substantial Completion, but Owner will allow Design/Builder reasonable access to complete or correct items on the list of items to be completed.

13.06 Partial Utilization

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Construction which (i) has specifically been identified in the Contract Documents, or (ii) Owner and Design/Builder agree constitute a separately functioning and usable part of the Construction that can be used by Owner for its intended purpose without significant interference with Design/Builder's performance of the remainder of the Construction, subject to the following:
1. Owner at any time may request Design/Builder in writing to permit Owner to use or occupy any such part of the Construction which Owner believes to be ready for its intended use and substantially complete. If Design/Builder agrees that such part of the Work is substantially complete, Design/Builder and Owner will follow the procedures of Paragraph 13.05 for that part of the Construction.
 2. Design/Builder at any time may notify Owner in writing that Design/Builder considers any such part of the Work ready for its intended use and substantially complete and request Owner to issue a certificate of Substantial Completion for that part of the Work.
 3. Within a reasonable time after either such request, Owner and Design/Builder shall make an inspection of that part of the Work to determine its status of completion. If Owner does not consider that part of the Work to be substantially complete, Owner will notify Design/Builder in writing giving the reasons therefor. If Owner considers that part of the Work to be substantially complete, the provisions of Paragraph 13.05 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 4. No use or occupancy of part of the Construction will be accomplished prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

13.07 Final Inspection

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

13.08 Final Payment

- A. Application for Payment.

1. After Design/Builder has completed all such corrections to the satisfaction of Owner and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance, certificates of inspection, record documents (as provided in

Paragraph 6.12) and other documents, Design/Builder may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (unless previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to Owner) of all Liens arising out of or filed in connection with the Work.
 3. In lieu of such releases or waivers of Liens specified in Paragraph 13.08.A.2 and as approved by Owner, Design/Builder may furnish receipts or releases in full and an affidavit of Design/Builder that: (i) the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and (ii) all payrolls, material and equipment bills and other indebtedness connected with the Work for which Owner might in any way be responsible, or which in any way might result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Design/Builder may furnish a Bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.
- B. Final Payment and Acceptance: If Owner is satisfied that the Work has been completed and Design/Builder's other obligations under the Contract Documents have been fulfilled, Owner will, within ten (10) days after receipt of the final Application for Payment, give written notice to Design/Builder that the Work is acceptable. Otherwise, Owner will return the Application to Design/Builder, indicating in writing the reasons for refusing to process final payment, in which case Design/Builder shall make the necessary corrections and resubmit the Application.
- C. Payment Becomes Due: Thirty days after the presentation to Owner of the acceptable Application and accompanying documentation, in appropriate form and substance and with Owner's notice of acceptability, the amount will become due and will be paid by Owner to Design/Builder.

13.09 Final Completion Delayed

- A. If, through no fault of Design/Builder, final completion of the Work is significantly delayed, Owner shall, upon receipt of Design/Builder's final Application for Payment, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in Paragraph 5.01.A, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Design/Builder to Owner with the Application for such payment. Such payment shall be made under the terms

and conditions governing final payment, except that it shall not constitute a waiver of Claims.

13.10 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
1. A waiver of all Claims by Owner against Design/Builder, except Claims arising from unsettled Liens, from defective Construction appearing after final inspection pursuant to Paragraph 13.07, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Design/Builder's continuing obligations under the Contract Documents; and
 2. A waiver of all Claims by Design/Builder against Owner other than those previously made in writing and still unsettled.

ARTICLE 14 – SUSPENSION OF WORK AND TERMINATION

14.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 days by notice in writing to Design/Builder which will fix the date on which Work will be resumed. Design/Builder shall resume the Work on the date so fixed. Design/Builder shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Design/Builder makes a Claim therefor as provided in Article 9.

14.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events justifies termination for cause:
1. Design/Builder's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under Paragraph 2.06.A as adjusted from time to time pursuant to Paragraph 6.05).
 2. Design/Builder's disregard of Laws or Regulations of any public body having jurisdiction.
 3. Design/Builder's violation in any substantial way of provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 14.02.A occur, Owner may, after giving Design/Builder (and the surety, if any) seven days' written notice, terminate the

services of Design/Builder, take possession of any completed Drawings and Specifications prepared by or for Design/Builder (subject to the indemnification provisions of Paragraph 3.05.A), exclude Design/Builder from the Site, and take possession of the Work and of all Design/Builder's tools, appliances, construction equipment and machinery at the Site and use the same to the full extent they could be used by Design/Builder (without liability to Design/Builder for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Design/Builder but which are stored elsewhere, and finish the Work as Owner may deem expedient. In such case Design/Builder shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all costs, losses and damages sustained by Owner arising out of or resulting from completing the Work (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) such excess will be paid to Design/Builder. If such costs, losses and damages exceed such unpaid balance, Design/Builder shall pay the difference to Owner. Such costs, losses and damages incurred by Owner will be incorporated in a Change Order. When exercising any rights or remedies under this paragraph Owner shall not be required to obtain the lowest price for the Work performed.

- C. Notwithstanding Paragraph 14.02.B, Design/ Builder's services will not be terminated if Design/Builder begins, within seven days of receipt of notice of intent to terminate, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- D. Where Design/Builder's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Design/Builder then existing or which may thereafter accrue. Any retention or payment of moneys due Design/Builder by Owner will not release Design/Builder from liability.

14.03 Owner May Terminate for Convenience

- A. Upon seven days' written notice to Design/Builder, Owner may, without cause and without prejudice to any other right or remedy of Owner, elect to terminate the Contract. In such case, Design/Builder shall be paid (without duplication of any items) for:
 - 1. Completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. Amounts paid in settlement of terminated contracts with Subcontractors, Suppliers and others (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs incurred in connection with termination of contracts with Subcontractors, Suppliers and others); and
 4. Reasonable expenses directly attributable to termination.
- B. Except as provided in Paragraph 14.03.C, Design/Builder shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

14.04 Design/Builder May Stop Work or Terminate

- A. If, through no act or fault of Design/Builder, the Work is suspended for a period of more than 90 days by Owner or under an order of court or other public authority, or Owner fails to act on any Application for Payment within thirty days after it is submitted or Owner fails for thirty (30) days to pay Design/Builder any sum finally determined to be due, then Design/Builder may, upon seven days' written notice to Owner, and provided Owner does not remedy such suspension or failure within that time, terminate the Agreement and recover from Owner payment on the same terms as provided in Paragraph 14.03.A. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if Owner has failed for 30 days to pay Design/Builder any sum finally determined to be due, Design/Builder may upon seven days' written notice to Owner stop the Work until payment is made of all such amounts due Design/Builder, including interest thereon. The provisions of this Paragraph 14.04.A are not intended to preclude Design/Builder from making Claim under Article 9 for an increase in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Design/Builder's stopping Work as permitted by this paragraph.

ARTICLE 15 – DISPUTE RESOLUTION

15.01 Methods and Procedures

- A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no such method and procedure has been set forth, Owner and Design/Builder may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 16 – MISCELLANEOUS

16.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the

individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by certified mail, postage prepaid, to the last business address known to the giver of the notice.

16.02 Computation of Times

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

16.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by:
 - 1. Laws or Regulations; or
 - 2. Any special warranty or guarantee; or
 - 3. Other provisions of the Contract Documents.
- B. The provisions of Paragraph 16.03.A will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

16.04 Survival of Obligations

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

16.05 Controlling Law

- A. The Contract Documents will be construed in accordance with the law of the place of the Project.

SECTION 00 73 00

SUPPLEMENTARY CONDITION

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SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Contract between Owner and Design/Builder (No. D-700, 2009 Edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

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

SC-5.04 DESIGN/BUILDER’S LIABILITY INSURANCE

SC-5.04.C Add the following new paragraph immediately after paragraph 5.04.B:

Policies Required. Prior to the commencement of any work under Project Proposal No. 25-0018WW and until completion and final payment is made for the work / final acceptance of the work, the Contractor will provide and maintain the following minimum levels of insurance at Contractor’s own expense. The cost of the required insurance shall be included in the Contractor’s proposal price and no adjustment shall be made to the contract price on account of such costs unless such approval is provided. The term Contractor shall include Subcontractors and Sub-Subcontractors of every tier. Contractor shall furnish Certificates of Insurance evidencing and reflecting the effective date of coverage as outlined below. In no event shall Work be performed until the required evidence of Insurance is provided in accordance with these Contract Documents and is approved by City of Dover (“Owner”). If found to be non-compliant, Owner may purchase the required insurance coverage(s) and the cost will be borne by the Contractor through direct payment/reimbursement to Owner or Owner may withhold payment to the Contractor for amounts owed to them.

- a. All insurance shall be procured from insurers permitted to do business in the State in which the project is taking place and having an A.M. Best Rating of at least “A-, Class VIII”.

- b. Contractor shall not have a Self Insured Retention (SIR) on any policy greater than \$50,000, which is the responsibility of the Contractor. If Contractor's policy(ies) has a Self Insured Retention exceeding this amount, approval must be received from the Owner prior to starting work. In the event any policy includes an SIR, the Contractor is solely responsible for payment within the SIR of their policy(ies) and the Additional Insured requirements specified herein shall be provided within the SIR amount(s).
- c. All insurance required herein, with the exception of the Professional Liability Insurance, shall be written on an "occurrence" basis. Claims-Made coverage must include:
 - i. The retroactive date must be on or prior to the start of work under this contract; and
 - ii. The Contractor must purchase "tail coverage/an extended reporting period" or maintain coverage for a period of three years, subsequent to the completion of their work / final payment.
- d. The Contractor's insurance carrier (s) shall agree to provide at least thirty (30) days prior written notice to the Owner in the event coverage is canceled or non-renewed. In the event of cancellation or non-renewal of coverage(s), it is the Contractor's responsibility to replace coverage to comply with the Contract requirements so there is no lapse of coverage for any time period.

In the event the insurance carriers will not issue or endorse their policy(s) to comply with the above it is the responsibility of the Contractor to report any notice of cancellation or non-renewal at least thirty (30) days prior to the effective date of this notice.

- e. Contractor shall provide the Owner with Certificates of Insurance, evidencing the insurance coverages listed below, ten days prior to the start of work and thereafter upon renewal or replacement of each coverage. The Contractor shall not begin any work until the Owner has reviewed and approved the Certificate of Insurance. The required insurance shall not contain any exclusions or endorsements, which are not acceptable to the Owner.

Failure of the Owner to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

With respect to insurance maintained after final payment in compliance with a requirement below, an additional certificate(s) evidencing such coverage shall be provided to the Owner with final application for payment and thereafter upon renewal or replacement of such insurance until the expiration of the time period for which such insurance must be maintained.

- f. Owner/Client and the Owner, (including the Owner's Parent, Subsidiaries, and Affiliates) shall be added as ADDITIONAL INSURED(S) on all liability policies

(except Workers' Compensation and Professional Liability Policy, where applicable), for ongoing operations and completed operations (using ISO Endorsements CG 2010 and CG 2037, or their equivalents) on a primary noncontributory basis. Coverage to include ongoing and completed operations. Each of the Additional Insured's respective directors, officers, partners, members, employees, agents and representatives shall also be afforded coverage as an Additional Insured. Coverage should be provided for a period of three years subsequent to the completion of work/final payment.

If you are operating in a state that has implemented the "Anti-Indemnity" Additional Insured Endorsements, you are required to provide the state specific additional insured endorsements for ongoing and completed operations. These states include but are not limited to: Montana, New Mexico, Oregon, Colorado, Kansas, California, Louisiana, and Texas.

The Owner reserves the right to require Contractor to name other parties as additional insureds as required by the Owner.

There shall be no "Insured versus Insured Exclusion" on any policies (other than "Named Insured versus Named Insured"); all policies will provide for "cross liability coverage" as per standard ISO policy forms.

- g. Waiver of Rights of Subrogation: Contractor shall waive all rights of recovery against Owner/Client, the Owner and all the additional insureds for loss or damage covered by any of the insurance maintained by the Contractor.
- h. The amount of insurance provided in the required insurance coverages, shall not be construed to be a limitation of the liability on the part of the Contractor.
- i. The carrying of insurance described shall in no way be interpreted as relieving the Contractor of any responsibility or liability under the contract.
- j. Any type of insurance or any increase in limits of liability not described above which the Contractor requires for its own protection or on account of statute shall be its own expense.
- k. Contractor shall promptly notify the Owner and the appropriate insurance company(ies) in writing of any accident(s) as well as any claim, suit or process received by the Contractor arising in the course of operations under the contract. The Contractor shall forward such documents received to his insurance company(ies), as soon as practicable, or as required by their insurance policy(ies).

REQUIRED COVERAGES - the following may be provided through a combination of primary and excess policies in order to meet the minimum limits set forth below:

1. **Workers' Compensation and Employer's Liability:**

Provided in the State in which the work is to be performed and elsewhere as may be required and shall include:

- a. Workers' Compensation Coverage: Statutory Requirements
- b. Employers Liability Limits not less than:

Bodily Injury by Accident:	\$100,000 Each Accident
Bodily Injury by Disease:	\$100,000 Each Employee
Bodily Injury by Disease:	\$500,000 Policy Limit
- c. USL&H, Maritime Liability, FELA, and DBA Coverage, if applicable.
- d. Includes coverage for sole proprietors, partners, members or officers who will be performing the work.
- e. Where applicable, if the Contractor is lending or leasing its employees to OWNER for the work under this contract (e.g. crane rental with operator), it is the Contractor's responsibility to provide the Workers Compensation and Employer's Liability coverage and to have their policy endorsed with the proper Alternate Employer Endorsement in favor of OWNER.

2. **Commercial General Liability:**

Provided on ISO form CG 00 01 04 13 or an equivalent form including Premises - Operations, Independent Contractors, Products/Completed Operations, Broad Form Property Damage, Contractual Liability, and Personal Injury and Advertising Injury.

- a. Occurrence Form with the following limits:

(1) General Aggregate:	\$2,000,000
(2) Products/Completed Operations Aggregate:	\$2,000,000
(3) Each Occurrence:	\$1,000,000
(4) Personal and Advertising Injury:	\$1,000,000
- b. Products/Completed Operations Coverage must be maintained for a period of at least three (3) years after final payment / completion of work (including coverage for the Additional Insureds as set forth in these Insurance Requirements).
- c. The General Aggregate Limit must apply on a **Per Project basis**.
- d. No Exclusions for residential construction with respect to the work to be completed by the Contractor.
- e. Coverage for "Resulting Damage".
- f. No sexual abuse or molestation exclusion.
- g. No amendment to the definition of an "Insured Contract".
- h. The definition of an "Insured Contract" must be amended to provide coverage for all work on or within 50 feet of a railroad, if applicable. A stand alone Railroad Protective Liability policy may be required based on the scope of this project.

3. **Automobile Liability:**

- b. Minimum Limits of Liability:
 - Per Claim: \$1,000,000
 - Aggregate: \$1,000,000

Privacy Breach Notification and Credit Monitoring: \$250,000 Per Occurrence

- A. Qualification; Priority; Contractors' Coverage. The insurer must be authorized to do business under the laws of the State of Delaware. Such insurance will be primary. All contractors and all of their subcontractors who perform work on behalf of Contractor shall be responsible for carrying, in full force and effect, worker's compensation and employer's liability, and automobile liability insurance coverage.
- B. Certificate of Insurance; Other Requirements. At the execution of this Agreement and prior to each insurance policy expiration date during the term of this Agreement, Contractor will furnish the City of Dover with a Certificate of Insurance with the CITY named as an additional insured. The Certificate shall reference this Agreement and worker's compensation and property insurance waivers of subrogation required by this Agreement. City of Dover shall be given thirty (30) calendar days advance notice of cancellation or nonrenewal of insurance during the term of this Agreement.
- C. Limits. The limits of liability set out in this Agreement may be increased by mutual consent of the parties, which consent will not be unreasonably withheld by either party, in the event of any factors or occurrences, including substantial increases in the level of jury verdicts or judgments or the passage of state, federal or other governmental compensation plans, or laws which would materially increase the City of Dover's exposure to risk.
- D. Deductible/Self-insurance Retention Amounts. Contractor shall be fully responsible for any deductible or self-insured retention amounts contained in its insurance program or for any deficiencies in the amounts of insurance maintained.

SC-13.05 SUBSTANTIAL COMPLETION

SC-13.05.A Add at the end of the paragraph.

Final site restoration will not be required for Substantial Completion but shall be completed prior to the Pre-Final Acceptance Inspection detailed in Closeout Procedures 01 77 00, 1.05.B.

SC-15 DISPUTE RESOLUTION

Add the following new paragraph immediately after 15.01.

SC-15.02 DISPUTE RESOLUTION AGREEMENT

- A. Owner and Design/Builder agree that they will first submit any and all unsettled Claims, counterclaims, disputes and other matters in question between them arising out of or relating to the Contract Documents, or the performance or breach thereof, (“disputes”) to mediation by 30 days prior to either of them initiating against the other a demand for arbitration pursuant to paragraph 15.02.B through 15.02.E, unless delay in initiating arbitration would irrevocably prejudice one of the parties. Any time limits within which to file a demand for arbitration shall be suspended with respect to a dispute submitted to mediation within those same applicable time limits and shall remain suspended until 10 days after the termination of the mediation. The mediator of any dispute submitted to mediation under this Agreement shall not serve as arbitrator of such dispute unless otherwise agreed.
- B. All Claims, disputes and other matters in question between Owner and Design/Builder arising out of or relating to the Contract Documents, or the performance or breach thereof (except for Claims which have been waived by the making or acceptance of final payment as provided by paragraph 13.09) will be decided by binding arbitration in accordance with the rules of the State of Delaware subject to the limitations of this paragraph 15.02. This agreement to arbitrate and any other agreement or consent to arbitrate entered into in accordance herewith as provided in this paragraph 15.02 will be specifically enforceable under the prevailing law of any court having jurisdiction. The award rendered by the arbitrators shall be consistent with the Contract Documents and shall cite the provisions of the Contract Documents deemed applicable in making the award.
- C. Notice of the demand for arbitration will be filed in writing with the other party to the Agreement and with the designated arbitration entity. The demand for arbitration will be made within a reasonable time after the Claim, dispute, or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such Claim, dispute, or other matter in question would be barred by the applicable statute of limitations.
- D. Except as provided in paragraph 15.01.E below, no arbitration arising out of or relating to the Contract Documents shall include by consolidation, joinder, or in any other manner any other individual or entity who is not a party to this contract unless:
 - 1. the inclusion of such other individual or entity is necessary if complete relief is to be afforded among those who are already parties to the arbitration, and
 - 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings, and

3. the written consent of the other individual or entity sought to be included and of Owner and Design/Builder has been obtained for such inclusion, which consent shall make specific reference to this paragraph; but no such consent shall constitute consent to arbitration of any dispute not specifically described in such consent or to arbitration with any party not specifically identified in such consent.
- E. Notwithstanding paragraph 15.01.D, if a Claim, dispute, or other matter in question between Owner and Design/Builder involves the Work of a Subcontractor or Supplier, either Owner or Design/Builder may join such entity as a party to the arbitration between Owner and Design/Builder hereunder. Design/Builder shall include in all subcontracts required by paragraph 6.06.E a specific provision whereby the Subcontractor consents to being joined in arbitration between Owner and Design/Builder involving the Work of such Subcontractor. Nothing in this paragraph 15.01.E, nor in the provision of such subcontract consenting to joinder shall create any Claim, right, or cause of action in favor of Subcontractor or Supplier against Owner.

END OF SECTION

SECTION 01 10 00

SUMMARY

PART 1 – GENERAL

1.01 PROJECT DESCRIPTION

The City of Dover, Department of Water & Wastewater, Water Treatment and Production Division (Division) owns and operates fifteen (15) deep groundwater wells, seven (7) water storage tanks and a 3MGD water treatment plant receiving water from six (6) shallow groundwater wells. The Division owns and operates an existing Supervisory Control and Data Acquisition (SCADA) system for its deep wells and tanks, installed in 2003. This system serves a population of approximately 39,000 people.

This project includes the upgrade of the existing SCADA system for its deep wells and water storage tanks, including removal and disposal of portions of the existing SCADA system that get replaced.

The DESIGN/BUILDER will be responsible for all permitting, software, hardware, programming, installation, testing, start up and commissioning services, and training required for the successful implementation of the upgrade of the existing SCADA system.

The central location of this system is located at the city's water treatment plant, along with remote terminal units (RTUs) at various well and water storage tank locations throughout the city. The existing SCADA system is composed of Microcat remote terminal units (RTUs), LC2000s RTUs and LC3000 RTU. **THE INVENTORY OF THE EXISTING SYSTEM IS AVAILABLE UPON REQUEST TO THE CITY OF DOVER AT 302-736-7025, ATTENTION KATE MILLS.**

1.02 PROJECT OBJECTIVES

- A. Applicable Codes and Standards
 - 1. Design and construct the Work in accordance with the latest revision or edition of the following referenced codes and standards. The term "Latest Revision or Edition" is defined as the version as of the project award date.
 - 2. Industry Codes
 - a. International Building Code (IBC), 2009.
 - b. International Plumbing Code (IPC), 2009
 - c. International Mechanical Code (IMC), 2009
 - d. International Energy Conservation Code (IECC), 2009
 - e. International Code Council Performance Code (ICCPC), 2009
 - f. International Fire Code, 2009

- g. NFPA National Fire Codes
 - h. NFPA Life Safety Code, 2009
 - i. NFPA National Electrical Code (NEC)
3. Industry Standards
- a. American National Standards Institute, Inc. (ANSI)
 - b. American Society of Civil Engineers (ASCE)
 - c. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
 - d. American Society of Mechanical Engineers (ASME) / ASME International
 - e. American Society of Sanitary Engineers (ASSE)
 - f. American Society for Testing and Materials (ASTM) / ASTM International
 - g. American Water Works Association (AWWA)
 - h. Factory Mutual (FM)
 - i. Master Painter Institute (MPI)
 - j. National Electrical Manufacturer's Association (NEMA)
 - k. National Roofing Contractors Association (NRCA)
 - l. Recommended Standards for Water Works, as revised (Ten States Standards)
 - m. Underwriters Laboratories, Inc. (UL)
4. Government Codes and Standards
- a. Local Standards
 - 1) City of Dover, Delaware Code of Ordinances and Charter, latest version.
 - 2) Fire Prevention Codes of the City of Dover
 - 3) Kent County, Delaware Code of Ordinances, Part II, Chapter 180 Sanitary Standards, as revised
 - b. State Standards
 - 1) Delaware Administrative Code
 - 2) Delaware Code
 - 3) Delaware State Fire Prevention Regulations
 - 4) Delaware Department of Transportation (DelDOT) Utilities Manual, as revised
 - 5) State of Delaware Administrative Code, Title 7, Section 7200 Surface Water Discharge Section, as revised
 - 6) State of Delaware Administrative Code, Title 16, Section 4462 Public Drinking Water Systems, as revised
 - c. Federal Standards
 - 1) 28 CFR Part 36 ADA Standards for Accessible Design
 - 2) Occupational Safety and Health Association (OSHA)

5. Owner Standards
 - a. City of Dover Water/Wastewater Handbook, and City of Dover’s Specifications, Standards, and Procedures for Public Works Construction
- B. Sustainable Design
 1. Provide integrated sustainable design strategies and features to minimize the energy consumption of the facilities; conserve resources; minimize adverse effects to the environment; and improve occupant productivity, health, and comfort.
- C. Energy Conservation
 1. Conform to the latest edition of ASHRAE/IESNA Standard 90.1-2004 “Energy Standard for Buildings Except Low-Rise Residential Buildings”, January 2004.

1.03 EXISTING CONDITIONS

- A. The existing SCADA system for the deep wells and tanks was installed in 2003. The system is located at various locations throughout the city of Dover, Delaware.
- B. The SCADA system controls and monitors the deep wells and water storage tanks for the Division.
 1. Thirteen (13) out of the fifteen (15) deep wells have radio communication with the SCADA system. Five (5) out of the seven (7) water storage tanks have radio communication with the SCADA system.
 2. The deep wells are controlled by water levels in the water storage tanks.
 3. See Appendix B for current operations at Division deep well sites.
- C. The existing SCADA system operates using a radio communication system under a Federal Communications Commission (FCC) microwave industrial radio license.
- D. See Appendix C for a list of existing inputs, outputs and alarms.
 - Please note that that inputs, outputs, or alarms marked as NOT USED, will not be required in the proposed upgrade. Please see 1.04.O below for additional alarms to be added.
- E. Below is a common list of signals from RTU at one of our well sites to Master (Inputs = into the Master, Outputs = to the RTU at the well):

RTU

Base card, 8 DI-4 DO-1 AI		Comment
DI		
1	Local Hand (Off/Hand)	

2	Local Auto (Hand/Auto)	
3	Status (Stop/Run)	
4	Not Used	
5	Not Used	
6	Not Used	
7	Not Used	
8	Not Used	
DO		
1	Well Start (Off/On)	
2	Not Used	
3	Not Used	
4	Not Used	
AI		
1	Chlorine Residual	4-20mA from chlorine analyzer = 800 – 4000 at RTU; Translated to 0 – 5 ppm at master

Expansion card, 4 AI		Comment
AI		
1	Flow	4-20mA from flow meter = 800 – 4000 at RTU; Translated to 0 – 1,500 gpm at master
2	Not Used	
3	Not Used	
4	Not Used	

Expansion card, 4 AO		Comment
AO		
1	Frequency Required	800 – 4000 from master = 4-20mA into RTU; Translated 0 – 60 Hz at VFD
2	Not Used	
3	Not Used	

- F. **THE “INVENTORY OF THE EXISTING SYSTEM” IS AVAILABLE UPON REQUEST TO THE CITY OF DOVER AT 302-736-7025, ATTENTION KATE MILLS.**

1.04 DESIGN CONCEPTS

- A. Each facility in the existing SCADA system shall have its own RTU. A facility is defined as a deep well or water storage tank.
- There are two (2) separate locations which each have two (2) facilities sharing the same RTU: Location 1) Well 13R & Bayard Ave Tank and Location 2) Well 10 & Well 14. These facilities can each continue to share the same RTU in the proposed upgrade submitted by the proposer.
 - There is a new well (Well #5R) not included in the “INVENTORY OF THE EXISTING SYSTEM”. Existing conditions of Well #5R consist of the following and will need to be included in the proposer’s SCADA proposal:
 - a. No current communication with our existing SCADA system.
 - b. PLC Hardware: Siemens Intralink LC2000
 - c. OIT: Siemens Intralink OI3000
 - d. Enclosure: Hoffman A30H2412GQRLP
- B. The system shall be designed specifically for remote monitoring and control of the facilities.
- C. The system shall be configured with a full dual-redundancy and automatic fail-over to avoid downtime in the event of a hardware, software or communication failure.
- The proposed SCADA system shall have the ability to run and monitor the deep wells and tanks if the Master SCADA system located at the main water treatment plant loses power, communications, or there is an equipment failure. The proposer should determine the best way to address this requirement, either physical or virtual, no allow for continuity of operations.
 - The city does not require local redundancy at each well or tank site.
- D. The existing radio communication system for the SCADA system shall be replaced with a cellular communication system.

- E. All proposed vendors, hardware and software shall have a minimum of ten (10) years of successful use in the water industry.
- F. Consideration should be taken on ease of operation by the City of Dover personnel.
- G. Consideration should be taken to design a SCADA system that will remain in operation for more than 15+ years without any major hardware updates.
- H. Consideration should be taken on the availability of replacement parts for the proposed SCADA system. (i.e. will there be long downtimes if a component of the proposed system fails?)
- I. The proposed software system shall be capable of accommodating in its database an unlimited quantity of status and control points, analog inputs, text points, communication lines, reports and graphic symbols.
- J. The SCADA upgrades shall be implemented using water industry security standard “best practices” including those features that will assist the Division in meeting or exceeding the cyber security considerations listed in Appendix A.
 - 1. The Proposer shall clearly identify the cyber security features and provide methodologies for maintaining these features.
 - 2. The Proposer shall be able to demonstrate that default settings can be removed once SCADA system is operational.
- K. Any proposed software shall be compatible with Windows, if applicable.
- L. Capabilities for SCADA system to provide e-mail, text, or phone call to water operators when in alarm.
- M. The Master Station should provide downloadable reports, a minimum of one (1) year of data storage, and data trending.
- N. The Operator Interface Terminal (OIT) shall support at a minimum:
 - 1. The ability to control/monitor any telemetered device in the field.
 - 2. Touchscreen display.
 - 3. User access controls based on privileges.
 - 4. Graphic displays.
 - 5. Tagging or adding notes.
 - 6. Provide trend graphics in a tabular view.
 - 7. View alarms and event logs.
 - 8. View historical graphs.

9. Editing capabilities to modify system map.
 10. Maintain a log of changes made to the system.
- O. Additional Alarms: Unauthorized Entry, Operator Emergency, High Chlorine Alarm.
- P. The Owner would like the option of having full technical and field support 24-7 for the operational life of the upgraded SCADA system. This includes any licensing and software updates, if applicable, for the proposed system. See REQUEST FOR PROPOSALS Section 12.01.

PART 2 – WORK INCLUDED

2.01 DESIGN

- A. Provide design for the upgraded SCADA system. This shall include all necessary design preparation to clarify the Owner’s functional requirements.
- B. Prepare drawings to show the general arrangement of the proposed SCADA system.
- C. Provide ladder wiring diagrams for the RTUs. The minimum information to be included on the diagrams is as follows:
1. Wiring from field instruments to the appropriate I/O point.
 2. Each signal isolation and signal conditioning equipment as required (e.g., a current-to-current isolator). All digital output points shall be furnished with isolating relays.
 3. Wiring numbers showing the I/O type (AI, AO, DI, and DO), controller card number, and I/O point number.
 4. Connections for DC power supplies.
- D. Graphic Display Descriptions
1. Identify each specific display and provide a brief description.
 2. Identify (preferably by indicating the name or number of the display directly on the I/O list) each I/O point (or calculated value) that should appear on each display.
- E. Alarm strategies for each alarm condition including both warning alarms and critical alarms. Warning alarms are defined as analog (or calculated) alarms that provide notification that a critical condition is being approached (e.g. low chlorine residual). Critical alarms initiate automatic action by the system to address a critical condition (e.g. shut down the pump; start a backup piece of equipment). Identify the specific action associated with each critical alarm. Identify initial alarm set points to be used at startup.

- F. Provide functional descriptions of the deep well and water storage tanks operating under the upgraded SCADA system, including a demonstration of the general system designed.
- G. Review Conceptual, 60% and Final design with the City of Dover's Information Technology (I.T.) Department.

2.02 CONSTRUCTION

- A. Provide programming, installation, factory and field testing, start-up and commissioning, demonstration and training for the upgraded SCADA system.
- B. Provide full technical support for the deployment of the upgraded system.
- C. Coordinate the installation with the City of Dover to determine means and methods for minimal disruption to the existing SCADA system.

END OF SECTION

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. General administrative requirements.
 - 2. Requirements for coordination between Project participants.
 - 3. Project meetings requirements.

1.02 REFERENCES

- A. Abbreviations and Acronyms
 - 1. QC – Quality Control

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
 - 1. Coordinate with the Owner to:
 - a. Submit list of Design/Builder and Subcontractor emergency contact personnel, addresses, and telephone numbers. Update list and resubmit as changes occur.
 - b. Furnish documentation verifying that necessary approvals from regulatory agencies have been obtained, if applicable.
 - c. Assist with scheduling, attend and participate in project meetings.
 - d. Furnish submittals for verification of compliance with the Contract Documents.
 - e. Submit proposed changes or substitutions in specified construction materials or procedures for review.
 - f. Submit proposed field design changes for review.
 - g. Furnish weekly documentation of work completed under time and materials contract terms including labor hours, materials and equipment used.
 - i. Furnish documentation supporting pay quantities, applications for payment, and requests for change orders.
 - j. Furnish construction progress documentation in accordance with Section 01 32 00 – CONSTRUCTION PROGRESS DOCUMENTATION.
 - k. Furnish Contract closeout documents in accordance with Section 01 78 00 –CLOSEOUT SUBMITTALS.

1.04 SUBMITTALS

Owner review is required for submittals designated as “Action Submittals”. Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. Submit the following in accordance with Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

- A. Action Submittals
Not Used
- B. Informational Submittals
 - 1. Special Procedure Submittals
 - a. List of emergency contacts.
- C. Closeout Submittals
Not Used
- D. Maintenance Material Submittals
Not Used

1.05 DESIGN/BUILDER’S RESPONSIBILITIES

- A. Perform work in accordance with the Contract Documents.
- B. Coordinate the Work and the work of subcontractors, delivery and staging of materials, access to work locations. Coordinate with other contractors performing work on-site not related to the subject project, if applicable.
- C. Supervise and direct the Work. Design/Builder is solely responsible for the means, methods, techniques, procedures and sequences.

1.06 SUPERVISION

- A. Furnish qualified personnel with minimum ten (10) years of experience in management of projects similar in size and complexity to this project.
- B. Owner reserves the right to interview the proposed personnel in order to verify the submitted qualifications.
- C. Project Personnel are subject to removal by Owner for non-compliance with requirements specified in the contract and for failure to manage the project to insure timely completion.
- E. Owner may issue an order stopping work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the

subject of claim for extension of time, for excess costs, or damages by the Design/Builder.

1.07 PROJECT MEETINGS

- A. Attend and participate in pre-construction conference, periodic progress meetings, and specially called meetings.
- B. Ensure representatives of Design/Builder, Subcontractors and suppliers attending meetings are qualified and authorized to act on behalf of the entity each represents.

1.08 PRE-CONSTRUCTION CONFERENCE

- A. Attend the pre-construction conference scheduled by the Owner. Do not commence Work prior to the conference.
- B. Attendees:
 - 1. Required Design/Builder Participants
 - a. Design/Builder's Superintendent
 - b. Major Subcontractors
 - d. Design Professionals
 - 2. Optional Design/Builder Participants
 - a. Major Suppliers
 - b. Utility Representatives
 - 3. Owner
- C. Address project orientation, personnel contact, safety issues, permits, project coordination issues, schedule, deficiencies, and the location of the Design/Builder's site office.
- D. Prepare Meeting Minutes

1.09 PROGRESS MEETINGS

- A. Attend monthly project meetings scheduled by the Owner. In addition to the regularly scheduled meetings, the Owner may schedule additional meetings at their discretion, at the request of government agency representatives, or at the request of the Design/Builder. The Design/Builder may initiate a meeting by addressing a request to the Owner.
- B. Progress Meetings may be held at the project site, if determined by Owner and Design/Builder.
- C. Attendees:
 - 1. Required Design/Builder Participants

- a. Design/Builder's Main Representative
 2. Optional Design/Builder Participants
 - a. Subcontractor representatives
 - b. Suppliers appropriate to the agenda
 - c. Design Professionals
 3. Owner
- D. Address:
1. Health and safety issues
 2. Work progress since previous meeting
 3. Projected progress during succeeding work period
 4. Field observations, problems, and conflicts
 5. Problems that impede construction schedule and proposed corrective actions
 6. Revisions to construction schedule
 7. Off-site delivery schedules
 8. Submittal schedules
 9. Quality control
 10. Proposed changes for effect on construction schedule and on completion date, and effect on other contracts of the project
 11. Payments: Paid, upcoming, due
 12. Other business as appropriate
- E. Prepare Meeting Minutes

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 32 00

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Construction progress schedule.
 - 2. Submittal schedule.
 - 3. Construction progress reporting.

1.02 REFERENCES

- A. Abbreviations and Acronyms
 - 1. NTP – Notice to Proceed

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
 - 1. Designate an authorized representative to be responsible for schedule preparation, required updating (activity status), and report preparation.
 - 2. Ensure authorized representative is experienced in scheduling projects similar in nature and complexity to this project and is experienced in using scheduling software that meets the specified requirements.

1.04 SUBMITTALS

Owner review is required for submittals designated as “Action Submittals”. Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. Submit the following in accordance with Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

- A. Action Submittals
 - 1. Initial project schedule
 - 2. Initial submittal schedule
- B. Informational Submittals
 - 1. Periodic schedule updates

2. Periodic submittal schedule updates
 3. Equipment delivery schedule
- C. Closeout Submittals
1. Record Documentation
 - a. Record schedule
 - b. Record submittal schedule
- D. Maintenance Material Submittals
Not Used

1.05 PROJECT SCHEDULE REQUIREMENTS

- A. General Requirements
1. Develop and maintain an accurate Project Schedule. Ensure consensus with Design/Builder management personnel, Subcontractors, and suppliers.
 2. Show the sequence Work will be performed in and start and completion dates for each schedule activity.
 3. Schedule the entire duration of the project.
 4. Use the Project Schedule to plan and monitor progress of the Work.
- B. Approved Project Schedule
1. The approved Project Schedule will be used to measure the progress of the work and to aid in evaluating time extensions.
 2. The schedule in conjunction with the Schedule of Values will provide the basis for each progress payment.
 3. Failure to submit schedules within the prescribed time will be basis for withholding approval of progress payments until the required schedule is submitted.
- C. Schedule Corrective Action
1. Show necessary corrective action to improve progress including increasing the number of shifts, overtime operations, days of work, and the quantity of construction resources to regain compliance with the approved Project Schedule.
 2. Submit for approval supplementary schedule or schedules to demonstrate how the approved rate of progress will be regained.
- D. Default Terms
1. Failure to take corrective action to maintain the approved Project Schedule will be grounds for determination that the Design/Builder is not

prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract.

2. Upon making this determination, the Design/Builder's right to proceed with the work, or any separable part of it, may be terminated in accordance with the default terms of the Contract.

E. Level of Detail Required

Develop the Project Schedule to the following level of detail:

1. Activity Duration
 - a. Duration that allows the progress of ongoing activities to be accurately determined between update periods.
 - b. Ensure less than 10 percent of non-procurement activities have original duration's greater than 20 workdays or 30 calendar days.
2. Procurement Activities
 - a. Activities associated with the submittal, approval, procurement, fabrication and delivery of long lead materials, equipment, fabricated assemblies and supplies.
 - b. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days.
 - c. A typical procurement sequence includes the string of activities: submit, approve, procure, fabricate, and deliver.
3. Mandatory Tasks
 - a. Submission and approval of as-built drawings
 - b. Performance Verification testing
 - c. Design/Builder's pre-final inspection
 - d. Correction of punch list from Design/Builder's pre-final inspection
 - e. Owner's pre-final inspection
 - f. Correction of punch list from the Owner's pre-final inspection
 - g. Final inspection
4. Owner's Activities
 - a. Show Owner's and other agency activities that could impact progress. Examples: approvals, environmental permit approvals by State regulators, inspections, utility tie-in, Owner furnished equipment and NTP for phasing requirements.
 - b. Label responsibility for Owner activities to Owner or the agency responsible for performing the activity.
5. Contract Changes
 - a. Show activity or sequence of activities added to the schedule as a result of a Contract Modification, at the time the modification is approved by Owner.
 - b. Add activities or sequence of activities resulting from alleged constructive changes made by Owner to the current schedule. Addition of these activities does not indicate Owner accepts

responsibility or liability for such activities and associated impacts to the schedule, but rather Owner recognizes such activities are appropriately added to the schedule for the purpose of maintaining a realistic and meaningful schedule.

F. Scheduled Project Completion and Activity Calendars

1. Schedule Interval: from NTP date to the required contract completion date.
2. Contract Completion Activity (End Project): based on the required contract duration in the accepted contract proposal, adjusted for approved contract time extensions.
3. First Scheduled Work Period: the day after the Design/Builder acknowledges NTP.
4. Schedule activities on a calendar to which the activity logically belongs.
5. Activities may be assigned to a 7-day calendar when the contract assigns calendar day duration for the activity such as an Owner Acceptance activity.
6. Schedule physical work less than seven (7) days per week on a calendar with non-work periods identified including weekends and holidays.
7. Anticipated Weather Delays
 - a. Use the National Oceanic and Atmospheric Administration's (NOAA) historical monthly averages for the NOAA location closest to the project site as the basis for establishing a "Weather Calendar" showing the number of anticipated non-workdays for each month due to adverse weather, Sundays and Federal Holidays as non-work days.
 - b. Assign the Weather Calendar to any activity that could be impacted by adverse weather.
 - c. Evaluation of requests for time extension due to adverse weather delay will be based on the difference of days between the anticipated and actual adverse weather delay if the number of actual adverse weather delay days exceeds the number of days anticipated for the month in which the delay occurs and the adverse weather delayed activities critical to contract completion.
 - d. A lost workday due to weather conditions is defined as a day in which the Design/Builder cannot work at least 50 percent of the day on the impacted activity.
8. Work periods not identified as non-work periods indicate that the Design/Builder intends to perform work during those periods.

1.06 PROJECT SCHEDULE SUBMISSIONS

A. Initial Project Schedule Submission

1. Submit the Initial Project Schedule for approval within 14 calendar days after NTP.
2. Ensure the schedule demonstrates a reasonable and realistic sequence of activities that represents the Work through the entire contract performance period.
3. Ensure the Initial Schedule presents the level of detail specified in Paragraph LEVEL OF DETAIL REQUIRED.

B. Periodic Schedule Updates

1. Submit complete updates of the Project Schedule containing approved progress, revisions, and adjustments every month.
2. Updated schedule will be subject to the approval of the Owner.
3. Address the following items on an activity-by-activity basis during each progress meeting.
 - a. Start and Finish Dates – Accurately show the status of the Actual Start and/or Actual Finish dates for each activity currently in-progress or completed since the last update. Only assign Actual Start dates when actual progress occurs on an activity.
 - b. Remaining Duration – Update the estimated Remaining Duration for incomplete activities independent of Percent Complete.
 - c. Percent Complete – Update the percent complete for each activity started, based on the realistic assessment of earned value.
 - d. Logic Changes – Identify and discuss logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Design/Builder proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. Owner will only approve logic revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.
 - e. Other Changes – Other changes required due to delays in completion of an activity or group of activities include:
 - 1) Delays beyond the Design/Builder's control, such as strikes and unusual weather.
 - 2) Delays encountered due to submittal reviews, Owner Activities, deliveries or work stoppages that make re-planning the work necessary.
 - 3) Changes correcting a schedule that does not represent the actual or planned prosecution and progress of the work.
4. Failure or refusal to furnish project schedule data necessary to verify the Design/Builder's progress will be deemed as the Design/Builder not providing an estimate upon which progress payment can be made.

- D. Record Schedule
 - 1. Submit the Record Project Schedule for approval within 14 calendar days after approval of as-built drawings.
 - 2. The Record Project Schedule will be subject to the approval of the Owner and must contain each approved revision and adjustment, Actual Start Dates, Actual Finish Dates, and indicate 100 Percent Complete for each activity.

1.07 REQUESTS FOR TIME EXTENSIONS

- A. Furnish justification, project schedule data, and supporting evidence for events that the Design/Builder believes it is entitled to an extension of the contract performance period, completion date, or any interim milestone date.
- B. Submission of proof of excusable delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is a condition precedent to any approvals by the Owner.
- C. Submit a schedule impact analysis demonstrating whether or not Work Change Directives issued by the Owner impact the critical path.
- D. Justification of Delay
 - 1. Clearly display that the Design/Builder has used, in full, the entire float time available for the work involved with the delay request.
 - 2. The Owner's determination as to the number of allowable days of contract extension will be based upon the project schedule updates in effect for the time period in question and other factual information.
 - 3. Actual delays that are found to be caused by the Design/Builder's own actions, which result in a calculated schedule delay, will not be a cause for an extension to the performance period, completion date, or any interim milestone date.
- E. Submission Requirements
 - 1. Submit justification for each request for a change in the contract completion date of less than 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change.
 - 2. Submit requests in accordance with the requirements of other appropriate Contract Clauses and include, as a minimum:
 - a. A list of affected activities, with their associated project schedule activity number.
 - b. A brief explanation of the causes of the change.
 - c. An analysis of the overall impact of the changes proposed.
 - d. A sub-network of the affected area.

3. Identify activities impacted in each justification for change by a unique activity code contained in the required data file.
- F. Additional Submission Requirements
1. Provide within 4 days of the request, an interim update with revised activities for any requested time extension of over 2 weeks.

1.08 DIRECTED CHANGES

- A. Submit proposed schedule revisions for changes in which the NTP is issued prior to settlement of price and/or time within 2 weeks of the NTP being issued.
- B. Submit proposed revisions to the schedule for approval prior to inclusion of those changes within the project schedule.
- C. Failure to submit proposed revisions will be basis for the Owner, at their discretion, to furnish the Design/Builder with suggested revisions to the project schedule. Include Owner suggested revisions in the project schedule until revisions are submitted and final changes and impacts have been negotiated.
- D. Submit objections to the Owner furnished revisions and proposed alternative within 2 weeks of receipt of the Owner revisions. Continue to update the schedule with the Owner revisions until a mutual agreement in the revisions is reached.
- E. Failure to submit alternative revisions within 2 weeks of receipt of the Owner's proposed revisions will indicate that the Design/Builder concurs with the Owner's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

1.09 OWNERSHIP OF FLOAT

- A. Float available in the schedule, at any time, will not be considered for the exclusive use of either the Owner or the Design/Builder.

1.10 SUBMITTAL SCHEDULE REQUIREMENTS

- A. Submit a Project Submittal Schedule showing full coordination with the project schedule.
- B. Indicate the proposed submittal number, referenced specification section, submittal description, proposed date of submittal, and date that review is required by.
- C. Prioritize and link to the progress schedule, products and tests under each submittal number.
- D. Periodic Submittal Schedule Updates

1. Submit a complete update of the Project Submittal Schedule indicating status of review and revisions biweekly.
 2. Update information including proposed submittal date, actual submittal dates, actual review completion dates, disposition of reviewed submittals, and status of items requiring revision and re-submittal. Clearly indicate submittals that are beyond the allotted review period.
- E. Record Submittal Schedule
1. Submit the Record Project Submittal Schedule for approval within 14 calendar days after approval of as-built drawings.
 2. The Record Project Submittal Schedule will be subject to the approval of the Owner and shall contain actual submittal dates, actual review completion dates, and final disposition.

1.11 EQUIPMENT DELIVERY SCHEDULE

- A. Submit a schedule showing procurement plans for materials and equipment within 14 calendar days after acceptance of the proposed construction schedule.
- B. Submit the following information:
1. Description.
 2. Date of the purchase order.
 3. Promised shipping date.
 4. Name of the manufacturer or supplier.
 5. Date delivery is expected.
 6. Date the material or equipment is required, according to the current construction schedule.
 7. Location where delivered material will be stored.
- C. When the expected delivery date exceeds the date required, submit a description of the effect that delayed delivery date will have on the contract completion date and a summary of efforts made by the Design/Builder to expedite the delayed delivery date to bring it in line with the needed delivery date, including efforts made to place the order (or subcontract) with other suppliers.
- D. Update the equipment delivery schedule at monthly intervals or when the schedule has been revised. Reflect any changes occurring since the last update.
- E. Submit copies of the purchase orders and confirmation of the delivery dates as directed.

1.12 CONSTRUCTION PROGRESS REPORTING REQUIREMENTS

- A. Submit monthly Progress Reports addressing potential factors of delay, deficiencies, material delivery schedules, submittals, and safety issues.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 33 00
SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. General procedures regarding submittals called for in other sections of the specifications.

1.02 REFERENCES

A. Definitions

1. Action Submittals – Submittals requiring responsive action by the Owner to determine consistency with the design intent indicated in the Contract Documents.
2. Certificates – Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system, or material attesting that product, system, or material meets specification requirements. Must be dated after award of project contract and clearly name the project. Document required of Contractor, or of a manufacturer, supplier, installer, or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures and acceptability of methods or personnel qualifications.
3. Closeout Submittals – Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism. Special requirements necessary to properly close out a construction contract; for example, Record Drawings, manufacturer's help, and product lines necessary to maintain and install equipment; in addition, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract.
4. Design Data – Design calculations, mix designs, analyses or other data pertaining to a part of Work.
5. Information Submittals – Submittals not requiring responsive action by the Owner.
6. Manufacturer's Field Reports – Documentation of the testing and verification actions taken by manufacturer's representative at the job site, in the vicinity of the job site, on a portion of the work, during or after installation, to confirm compliance with manufacturer's standards or

instructions. The documentation must be signed by an authorized official of a testing laboratory or agency and must state the test results; and indicate whether the material, product, or system has passed or failed the test.

7. Manufacturer's Instructions – Preprinted material describing installation of a product, system or material, including special notices and MSDSs concerning impedances, hazards, and safety precautions.
8. Operation and Maintenance Data – Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item. This data is intended to be incorporated in an operations and maintenance manual or control system.
9. Originator – the designated person or organization responsible for producing a submittal and submitting it to the QC Manager for review.
10. Preconstruction Submittals – submittals that are required after contract award but prior to a notice to proceed with construction on a new contract.
11. Product Data – catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work; and samples of warranty language when the contract requires extended product warranties.
12. QC Manager –designated person authorized by the Contractor to approve submittals.
13. Shop Drawings – drawings, diagrams and schedules specifically prepared to illustrate some portion of the work. Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project. Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.
14. Submittals – data normally submitted for review to establish conformance with the design concept and Contract Documents.
15. Test Reports – report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.) Report that includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site. Report that includes finding of a test made at the job site, on portion of work during or after installation.

16. Work – as used in this section, on- and off-site construction required by Contract Documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordination

1. Make submittals as required by the specifications.
2. Furnish submittals in addition to those specified to adequately describe the work covered in the respective sections.
3. Use the same units of weights and measures on submittals as those used in the Contract Documents.
4. Furnish each submittal complete and with sufficient detail to allow ready determination of compliance with Contract requirements.
5. Furnish submittals that have been checked, approved, stamped, signed, and dated by the QC manager, indicating action taken for each item.
6. Clearly identify proposed deviations from the Contract requirements.
7. Include applicable Contractor's, manufacturer's, or fabricator's drawings; descriptive literature in the form of catalog cuts, diagrams, operating charts or curves; test reports; O&M manuals with parts list when applicable; certifications; warranties; and other such required submittals.
8. When Owner review is required, obtain Owner review prior to the acquisition of the material or equipment.

B. Scheduling

1. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential requirements to resubmit.
2. Except as specified otherwise, allow review period that includes sufficient working days for QC manager's approval and an additional 10 working days for submittals requiring Owner's review.
3. QC manager review period begins when the QC manager receives the submittal from the originator. Owner review period begins when Owner receives the approved submittal from the QC manager.
4. Period of review for each re-submittal is the same as for initial submittal.
5. No delay damages or time extensions will be allowed for time lost in late submittals.

1.04 SUBMITTAL CLASSIFICATION

A. Action Submittal

1. Unless otherwise specified, submit product data and shop drawings as action submittals. Individual sections of the Specifications further define action submittals.
2. Owner review and acceptance are required for deviations from the Agreement and other items as designated in the Contract Documents.

B. Informational Submittal

1. Submit information submittals to document the construction and to provide information to the Owner that verifies construction is in compliance with the Contract Documents.
2. Information submittals will be returned by the Owner marked “No Action Taken or Required” for tracking and record keeping purposes.
3. Classification as an information submittal does not relieve the QC manager from the obligation to review the submittal for conformance with the Contract Documents; does not relieve the Contractor of the requirement to furnish material conforming to the Contract Documents; does not relieve the Contractor of the requirement to repair or remove and replace nonconforming material incorporated in the work.
4. Information submittals found not to comply with the Contract Documents will be processed as non-conforming work.

C. Closeout Submittals

1. Submit closeout submittals and O&M data to the Owner for review for compliance with the requirements of the Contract Documents. Submit data specified for a given item within 30 calendar days after the item is delivered to the site.
2. In the event the Contractor fails to deliver closeout submittals and O&M data within the time limits specified, the Owner may withhold from progress payments the retainage for the item that the submittals are applicable to.

1.05 PROCEDURES FOR SUBMITTALS

A. Reviewing, Certifying, Approving Authority

1. Unless otherwise specified for a specific submittal, the QC manager is responsible for reviewing and approving or certifying that submittals are in compliance with Contract requirements.

B. Constraints

1. Complete submittals for each definable feature of work. Submit components of definable features interrelated as a system at the same time.
2. Submittal will be returned without review when acceptability of the submittal is dependent on conditions, items, or materials included in separate subsequent submittals.
3. Approval of a separate material, product, or component does not imply approval of assembly in which item functions.

C. Variations

1. Variations from Contract requirements require Owner review and will be considered where advantageous to the Owner. Product variations for the security fence will not be accepted.
2. Discuss how functional and quality requirements are met with the Owner prior to submission to minimize rejections and re-submittals.
3. Proposing Variations
 - a. When proposing variation, deliver written request to the OWNER with documentation of the nature and features of the variation and why the variation is desirable and beneficial to the OWNER.
 - b. If lower cost is a benefit, also include an estimate of the cost saving.
 - c. In addition to documentation required for variation, include the submittals required for the item.
 - d. Clearly mark the proposed variation in each document.
4. Warranting That Variations Are Compatible
 - a. When delivering a variation for consideration, Contractor warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.
5. Review Schedule Is Modified
 - a. In addition to normal submittal review period, allow an additional period of 10 working days for consideration by the Owner of submittals with variations.

D. Submittal Origination

1. Complete work that must be accomplished as basis of a submittal in time to allow submittal to occur as scheduled.
2. Determine and verify field measurements, materials, and field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the Work and Contract Documents.
3. Check that each page of the submittal is clearly legible and that selections are made for each option.
4. Indicate variations as required by Paragraph VARIATIONS.

5. Transmit submittals to the QC manager in accordance with schedule on approved Submittal Register and to prevent delays in the work. Do not transmit submittals directly to the Owner.
6. Furnish additional copies of submittal when requested.

E. QC Manager's Review

1. Note date submittal was received from originator on each submittal.
2. Check that each page of the submittal is clearly legible and that selections are made for each option.
3. Review each submittal and check and coordinate each submittal with requirements of Work and Contract Documents.
4. Review submittals for conformance with Project design concepts and compliance with Contract Documents.
5. Advise OWNER of variation, as required by Paragraph VARIATIONS.
6. Take appropriate action on submittal from the following possible actions based on review of submittal.
 - a. Approved – work included in the submittal can proceed, provided the submittal complies with requirements of the Contract Documents.
 - b. Approved as Noted – submittal is approved, provided modifications noted are properly incorporated. Resubmission is not necessary provided originator takes no exception to the notations.
 - c. Revise and Resubmit – modifications are required prior to approval. Work cannot proceed until the submittal is revised and resubmitted to the QC manager for review and approval.
 - d. Rejected – work covered by the submittal is not complete or does not conform to the Contract Documents and cannot proceed. Make a new submittal to the QC manager for review and approval.
7. Stamp each sheet of each submittal with QC manager's review action. Submittal in bound volume or on one sheet printed on two (2) sides may be stamped on the front of the first sheet only.
8. Sign and date each stamped page in original ink. Stamped signatures are not acceptable.
9. When Owner review is required or when a variation has been proposed, transmit submittal with the certification statement to the Owner.
 - a. QC manager's certification statement – "I certify that I have reviewed this submittal, verified dimensions, coordinated the requirements of the item with the overall project, and have determined that the submittal complies with the Contract Documents."
 - b. Sign and date certification statement in original ink. Stamped signatures are not acceptable.

10. Update submittal register as submittal actions occur and maintain the submittal register at project site until final acceptance of work.

F. Owner's Review

1. Owner will note date on which submittal was received from QC manager on each submittal requiring Owner's review.
2. Submittals that are not clearly legible will be returned to the QC manager without being reviewed.
3. Owner will review submittals within scheduling period specified to determine consistency with the design intent indicated in the Contract Documents. The Owner will not determine accuracy and completeness of dimensions or quantities or coordination with the Work.
4. Owner will identify appropriate action on submittal from the following possible actions based on review of submittal.
 - a. No Exception Taken – submittal is consistent with the design intent indicated in the Contract Documents. Work included in the submittal can proceed provided the submittal complies with requirements of the Contract Documents.
 - b. Furnish as Noted – work included in the submittal can proceed provided modifications noted are properly incorporated. Resubmission is not necessary provided Contractor takes no exception to the notations.
 - c. Revise and Resubmit – modifications are required to make the submittal consistent with the design intent indicated in the Contract Documents. Work cannot proceed until the submittal is revised and resubmitted to the QC manager for review and approval and resubmitted to the Owner for review.
 - d. Rejected – work covered by the submittal is not complete or is not consistent with the design intent indicated in the Contract Documents and cannot proceed. Make a new submittal to the QC manager for review and approval and submit to Owner for review.
 - e. No Action Taken or Required – informational submittal received for record keeping and tracking.
 - f. Not Required for Review – submittal is not required by the Contract Documents and has not been reviewed.

G. Resubmittal and Execution of the Work

1. Correct and resubmit submittal as directed. When resubmittal is required, provide a copy of the original submittal, including reviewer comments. Direct specific attention in writing or on the submittal to revisions not requested by the reviewers on previous submissions.
2. When the Contractor considers a submittal marked "Furnish as Noted" to constitute a change to the Agreement, give prompt notice in accordance with the Contract Documents to the OWNER.

3. Do not initiate work until submittals for that work have been returned by the QC manager as "Approved" or "Approved As Noted", except to the extent that a portion of work must be accomplished as basis of submittal.
4. After submittals have been returned by the QC manager as "Approved" or "Approved as Noted", resubmittal for the purpose of substituting materials or equipment will not be considered unless accompanied by an explanation of why a substitution is necessary.

1.06 FORMAT OF SUBMITTALS

A. Transmittal Form

1. Transmit submittals to the Owner with transmittal form accepted by the OWNER and standard for the project.
2. On the transmittal form, identify the Contractor and QC manager, indicate date of submittal, and include information prescribed by the transmittal form and required in Paragraph IDENTIFYING SUBMITTALS.

B. Identifying Submittals

1. Identify submittals with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form.
2. Mark each copy of each submittal identically, with the following:
 - a. Project title and location
 - b. Construction contract number
 - c. Section number of the specification section by which submittal is required
 - d. Submittal number of each component of submittal
 - e. When a resubmission, add alphabetic suffix on submittal description, for example, 10A, to indicate resubmission
 - f. Name, address, and telephone number of subcontractor, supplier, manufacturer and any other second tier Contractor associated with submittal
 - g. Product identification and location in project

C. Format for Shop Drawings

1. Submit on not less than A4 (8-1/2 by 11 inches, 297 by 210-mm) nor more than AO (30 by 42 inches, 1189 by 841 mm).
2. Present A4 (8-1/2 by 11 inches, 297 by 210-mm) sized shop drawings as part of the bound volume for submittals required by section.
3. Present larger drawings in sets.
4. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in Paragraph IDENTIFYING SUBMITTALS.

5. Dimension drawings, except diagrams and schematic drawings. Prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawing dimensions as indicated on the Contract Drawings. Identify materials and products for work shown.
6. Indicate nameplate data, size and capacity, applicable industry and technical society publication references.

D. Format of Product Data and Manufacturer's Instruction

1. Present product data submittals for each section as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.
2. Indicate, by prominent notation, each product that is being submitted. Indicate specification section number and paragraph number to which it pertains.
3. Supplement product data with material prepared for project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project, with information and format as required for submission of certificates.
4. Provide product data in English unit dimensions. Where product data are included in preprinted catalogs with metric only, submit English unit dimensions on separate sheet.
5. Include the manufacturer's name, trade name, place of manufacture, catalog model or number and applicable industry and technical society publication references. Submit manufacturer's data requiring supplemental information for clarification as specified for certificates.
6. Where equipment or materials are specified to conform to industry and technical society reference standards of the organizations such as American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), and Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and accepted by the OWNER. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.
7. Submit manufacturer's instruction prior to installation.

E. Format of Design Data and Certificates

1. Provide design data and certificates on 8-1/2 by 11 inches (297 by 210-mm) paper. Provide a bound volume for submittals containing numerous pages.

- F. Format of Test Reports and Manufacturer's Field Reports
 - 1. Provide reports on 8-1/2 by 11 inches (297 by 210-mm) paper in a complete bound volume.
 - 2. Indicate by prominent notation, each report in the submittal. Indicate specification number and paragraph number to which it pertains.
- G. Format of O&M Data
 - 1. Comply with the requirements specified in Section 01 78 00 – CLOSEOUT SUBMITTALS
- H. Format of Preconstruction Submittals and Closeout Submittals
 - 1. When submittal includes a document that is to be used in the project or become part of project record, other than as a submittal, do not apply Contractor's approval stamp to the document, but to a separate sheet accompanying the document.
 - 2. Provide dimensions in administrative submittals in English units. Where data are included in preprinted material with metric only, submit English unit dimensions on separate sheet.

1.07 QUANTITY OF SUBMITTALS

- A. Number of Copies of Product Data and Manufacturer's Instructions
 - 1. Submit in compliance with quantity requirements specified for shop drawings.
- B. Number of Copies Design Data and Certificates
 - 1. Submit in compliance with quantity requirements specified for shop drawings.
- C. Number of Copies Test Reports and Manufacturer's Field Reports
 - 1. Submit in compliance with quantity with quality requirements specified for shop drawings.
- D. Number of Copies of O&M Data
 - 1. Submit one (1) copy of O&M data for review.
- E. Number of Copies of Preconstruction Submittals and Closeout Submittals
 - 1. Unless otherwise specified, submit administrative submittals in compliance with quantity requirements specified for shop drawings.

1.08 WITHHOLDING OF PAYMENT

- A. Payment for materials incorporated in the Work will not be made when required approvals have not been obtained.
- B. No payment will be made for materials incorporated into the Work for action submittals or information submittals found to contain errors or deviations from the Agreement.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 33 00.05

DESIGN SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Design/Builder-originated design documents including design drawings and specifications for Design-Build.

1.02 REFERENCES

A. Definitions

1. Design Professional – licensed individual(s) providing Design Professional Services for the Design/Builder under a Design Sub-agreement.

1.03 ADMINISTRATIVE REQUIREMENTS

Not Used

1.04 SUBMITTALS

Owner review is required for submittals designated as “Action Submittals”. Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only.

A. Action Submittals

1. Preconstruction Submittals
 - a. Submittal Register
2. Design Data
 - a. Design Drawings
 - b. Specifications
 - c. Design Analysis
 - d. Design Submittals

B. Informational Submittals

Not Used

- C. Closeout Submittals
 - 1. Record Documentation
- D. Maintenance Material Submittals
 - Not Used

1.05 DESIGN QUALITY CONTROL

- A. Design/Builder Reviewing and Certifying Authority
 - 1. The QC organization is responsible for reviewing and certifying that design submittals are in compliance with the contract requirements.
- B. Owner Approving Authority
 - 1. The Contract Administrator is the approving authority for design submittals.
- C. Design Professional Certifying Authority
 - 1. The Design Professional is the design certifying authority.
 - 2. The Design Professional accepts responsibility for design of work in each respective design discipline, by stamping and approving final construction drawings submitted to the Owner approval authority.
- D. Design/Builder Construction Actions
 - 1. Upon submission of sealed and signed design documents certified by the Design Professional and the Quality Control (QC) Managers, the Design/Builder may proceed with material and equipment purchases, fabrication and construction of elements covered by that submittal, except as specified in the following paragraph.
 - 2. Exception to Design/Builder Construction Actions – the Owner will review the following final submittals before the Design/Builder will be allowed to proceed with construction:
 - a. Design submittals that include or will be impacted by a variation to the contract. Final Owner approval of the variation is required before construction can begin on the work included in that design submittal.
- E. Design/Builder's Responsibilities
 - 1. Designate Design Professional to be in responsible charge to coordinate the design effort of the entire project. Design Professional shall have the experience required to design the Work described in the Contract Documents. They will coordinate design segments of the project to assure consistency of design between design disciplines.

2. With the Design Professional, verify site information provided in the RFP. In addition, provide additional field investigations and verification of existing site conditions as might be required to support the development of design and construction of the project.
3. Indicate on the transmittal form accompanying submittal which design submittals are being submitted as shop drawings.
4. Advise Owner of variations, as required by paragraph 3.02 "Design Change and Variations."
5. Provide an updated, cumulative submittal register with each design package that identifies the design and construction submittals required by that design package and previous submittals.

F. QC Manager Responsibilities

1. The Design Professional must certify design submittals for compliance with the Contract Documents.
2. QC Manager shall certify submittals forwarded by the Design Professional to the Owner with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with Contract Number (insert contract number here), is in compliance with the Contract Documents, and is submitted for Owner approval.

Certified by QC Manager _____,
Date _____"

3. Sign certifying statement. The persons signing certifying statements shall be the QC organization members designated in the approved QC plan. Furnish signatures in original ink. Stamped signatures are not acceptable.
4. Update submittal register as submittal actions occur and maintain the submittal register at project site until final approval of work by Owner.
5. Retain a copy of approved submittals at project site.

G. Owner Responsibilities

1. Note date on which submittal was received from QC manager, on each submittal.
2. Perform a quality assurance (QA) review of submittals. Owner will notify Design/Builder when comments for that design package are posted and ready for Design/Builder evaluation and resolution.
3. Upon submittal of final design package and resolution of comments by the Design/Builder, the Owner will sign final design package, when approved, and return electronic copy of signed design documents to the Design/Builder.

4. Actions Possible – Submittals will be returned with one of the following notations:
 - a. Approved.
 - b. Not Reviewed: indicates submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and certified by Design/Builder, or is not complete. Submittal will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Design/Builder or for being incomplete, with appropriate action, coordination, or change.
 - c. Revise and Resubmit or Disapproved: indicates submittal is incomplete or does not comply with design concept or requirements of the Contract Documents and must be resubmitted with appropriate changes. If work has been started on the unacceptable portion of the design submittal, the Design/Builder shall propose corrective action. No further work shall proceed until the issue is resolved in a manner satisfactory to the Owner.

1.06 DESIGN DOCUMENTS

- A. Provide design documents that include design analysis, design drawings, and design specifications, reports, and submittal register.
- B. The Design/Builder is required to make product, material, and system selections during the project design and indicate these choices on the design documents. Accomplish this by submitting design drawings and specifications that include proprietary submittal information such as manufacturers name, product names, model numbers, product data, manufactures information, provided optional features, appropriate connections, fabrication, layout, and product specific drawings. Adherence to RFP submittal requirements and provision of Design Professional approved construction submittal information on the design submittals eliminates the need for follow-on traditional construction submittals after the final design is approved.
- C. The Design/Builder is required to submit proprietary information to describe the construction submittal information in the design documents for each product, material, and system on the project.
- D. Refer to Section 01 33 00 – SUBMITTAL PROCEDURES for requirements pertaining to Design/Builder proposed design changes or variations.

1.07 DESIGN DRAWINGS

- A. Submit files for the final Drawings via e-mail or ShareFile in a format agreed between the Design/Builder and Owner. Provide full, uncompressed, and unzipped Drawing files.
- B. Design Drawings Used as Shop Drawings

1. Design drawings may be prepared like shop drawings, to minimize construction submittals after final design is approved.
 2. If the Design/Builder chooses or is required to include the construction submittal information on the design documents, indicate proprietary information on the design drawings as necessary to describe the products, materials, or systems that are to be used on the project.
 3. Construction submittal information included directly in the design drawings must be approved by the Design Professional.
 4. Each design document must be professionally signed by the Design Professional.
- C. Drawing Format for Design Drawings Used as Shop Drawings
1. The Design/Builder-originated Drawings will be used as the basis for the record drawings.
 2. Ensure shop drawings included as design documents comply with the same drawing requirements such as drawing form, sheet size, layering, lettering, and title block used in design drawings.
- D. Identification of Design Drawings Used as Shop Drawings
1. Indicate on the Design/Builder's transmittal letter and submittal register which design drawings are being submitted as shop drawings.
- E. Owner Drawing Numbers
1. Number the final Design/Builder-originated design drawings consecutively with National CAD Standard drawing numbers.
- F. Signatures on Documents
1. Sign and date, by the Design Professional, each design drawing package.
- G. Units of Measure
1. Utilize English Inch-Pound units of measure on the design documents

1.08 SPECIFICATIONS

- A. Provide a Design/Builder-originated design specification that in conjunction with the Drawings, demonstrates compliance with requirements of the RFP.
- B. Use the specified products, materials, systems, and equipment that are approved by the Design Professional; submitted to the Owner by the Design/Builder; and reviewed by the Owner to construct the project.
- C. Include Specifications contained in the RFP as part of the Design/Builder-originated specification without modification.

D. Specifications Components and Format

1. Prepare design specifications that include a specification for each product, material, or system on the project.
2. If the Design/Builder chooses or is required above to combine design and construction submittal information on the design documents, provide a specification and also proprietary information such as catalog cuts and manufacturers data that demonstrates compliance with the RFP.
3. Provide project specifications to include the following:
 - a. Provide the specification cover sheet with the signature of the Design Professional of the project design team. Indicate the Design/Builder's company name and address on the specification coversheet.
 - b. Table of contents for entire specification.
 - c. Individual specification sections for each product, material, and system required by the RFP.
 - d. If proprietary information is provided or required, include a coversheet for the product, material, or system information that is being proprietarily specified. This information is to follow the related specification.
 - e. If proprietary information is provided or required, include highlighted and annotated catalog cuts, manufacturer's product data, tests, certificates, manufactures information and letters for each product, material, or system that is being proprietary specified.
 - f. Coordinated submittal register for each product, material and system with each design submittal. Provide a cumulative register that identifies the design and construction submittals required by each design package along with previous design submittals. Ensure the Design Professional assists in developing the submittal register by determining which submittal items are required to be approved by the Design Professional. Complete each field in the final submittal register in order to obtain Owner approval of the final design.

E. Identification of Manufacturer's Product Data Used as Specifications.

1. Provide complete and legible catalog cut sheets, product data, installation instructions, operation and maintenance instructions, warranty, and certifications for products and equipment for which final material and equipment choices have been made.
2. Indicate, by prominent notation, each product that is being submitted including optional manufacturer's features, and indicate where the product data shows compliance with the RFP.

F. Specification Software

1. Submit the final specification source files in MS Word and PDF.

1.09 DESIGN ANALYSIS

- A. The design analysis shall be a presentation of facts to demonstrate the concept of the project is fully understood and the design is based on sound engineering principles.
- B. Provide design analyses for each discipline and include the following:
 1. Basis of design that includes:
 - a. An introductory description of the project concepts that addresses the salient points of the design.
 - b. An orderly and comprehensive documentation of criteria and rationale for system selection.
 - c. The identification of any necessary licenses and permits that are anticipated to be required as a part of the design and construction process.
 2. Code and criteria search shall identify each applicable code and criteria and highlight specific requirements within these codes and criteria for critical issues in the facility design.
 3. Calculations as specified and as needed to support this design.
- C. Basis of Design Format
 1. The basis of design shall include a cover page indicating the project title and locations, contract number, table of contents, and tabbed separations for quick reference.
- D. Design Calculations
 1. Place the signature of the Design Professional for the work on the cover page of the calculations for the respective design discipline.

1.10 RECORD DOCUMENTS

- A. Record Drawings
 1. The as-built modifications shall be accomplished by electronic drafting methods on the Design/Builder-originated design drawings to create a complete set of record drawings.
 2. For each record drawing, provide drawing identical to signed Design/Builder-originated drawings that incorporate modifications to the as-built conditions. In addition, copy initials and dates from the Owner approved documents to the title block of the record drawings. The RFP reference or definitive drawings are not required for inclusion in the record set of Drawings.

4. After as-built conditions are recorded, produce a PDF file of each individual record drawing. Electronic signatures are not required on record drawings.
- B. Source Documents
1. Provide the specifications, design analysis, reports, surveys, calculations, and other contracted documents via e-mail or ShareFile with the record drawings.

PART 2 – PRODUCTS

2.01 DESIGN SUBMITTALS

- A. Required Design Submittals
1. Provide the following Design Submittal packages:
 - a. Provide comprehensive, multi-discipline, when applicable, design packages that include design documentation for project elements, fully developed to the design stage and indicated, except where specified otherwise.
 - b. Concept Design
 - c. Design Development in-progress - Owner Progress- 14 calendar day Owner review time.
 - d. Pre-final (100%) Design - Owner Progress- 14 calendar day Owner review time.
 - e. Final Design – Owner- 14 calendar day Owner review time for submittals requiring Owner approval prior to construction.
- B. Design Submittal Review Schedule
1. Use the time frames for Owner submittal review identified in the RFP. For construction scheduling purposes add additional time to the identified minimum review time periods to allow for the following scheduling conditions:
 - a. Submittals received after noon will be logged in on the following business day.
 - b. Federal holidays will be considered non-working days for Owner personnel in reviewing design submittals.
 - c. The time period between December 23 and January 2 will be considered non-working time for Owner personnel in reviewing design submittals.
 - d. Postponement of delivery due to unavailability of personnel to receive the submittal. Coordinate delivery in advance of the submission.

- C. Distribution of Approved Final Design Drawings and Specification to Owner Representatives
 - 1. Submit within 14 calendar days of receiving the Owner approved final design documents, electronic and hardcopy(s) of these final documents to Owner for use during the construction of the project.

2.02 IDENTIFICATION OF DESIGN SUBMITTALS

- A. Provide a title sheet to clearly identify each submittal, the completion status, and the date.
- B. The title sheet shall be unique to a particular design submittal.
- C. Submit the project title sheet with design status and date for the design submittals.
- D. Critical Path Submittal Title Sheet
 - 1. Identify critical path submittals as such and include a title sheet indicating the type of critical path submittal, the status, and the date.

PART 3 – EXECUTION

3.01 DESIGN/BUILDER'S RESOLUTION OF COMMENTS

- A. Provide written responses to written comments by the Owner.
- B. Resubmit a complete package of an unacceptable design submittal that includes the required, specified components of that design submittal.
- C. When required by the Owner, Design/Builder resubmittal of design package, due to nonconformance to the contract, is not a delay in the contract.

3.02 DESIGN CHANGE AND VARIATIONS

- A. Refer to Section 01 33 00 – SUBMITTAL PROCEDURES for further explanation and requirements of design change and variation.
- B. Design changes that the Design/Builder considers to be beyond the requirements of the contract, must be identified as a design change during the early stages of the design development.
- C. Design changes that will lead to an extra cost or schedule extension must be identified prior to the first design submittal that includes the design change.
- D. Design changes that lead to extra cost or schedule extension identified after the first design submittal review will not be considered.

END OF SECTION

SECTION 01 33 00.07

CONSTRUCTION SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. General procedures regarding construction submittals called for in other sections of the specifications.

1.02 REFERENCES

A. Abbreviations and Acronyms

1. SDS – Safety Data Sheet
2. O&M – Operations and Maintenance
3. QC – Quality Control

B. Definitions

1. Certificates – Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project. Document required of Design/Builder, or of a manufacturer, supplier, installer or subcontractor through Design/Builder, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.
2. Closeout Submittals – Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism. Special requirements necessary to properly close out a construction contract; for example, Record Drawings, manufacturer's help, and product lines necessary to maintain and install equipment. Also, submittal requirements necessary to properly close out a major phase of construction on a multi-phase contract is required.
3. Design Data – Design calculations, mix designs, analyses or other data pertaining to a part of work.
4. Manufacturer's Field Reports – Documentation of the testing and verification actions taken by manufacturer's representative at the job site or in the vicinity of the job site, on a portion of the work, during or after

installation, to confirm compliance with manufacturer's standards or instructions. The documentation must be signed by an authorized official of a testing laboratory or agency and must state the test results; and indicate whether the material, product, or system has passed or failed the test.

5. Manufacturer's Instructions – Preprinted material describing installation of a product, system or material, including special notices and SDSs concerning impedances, hazards and safety precautions.
6. Operation and Maintenance Data – Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item. This Data is intended to be incorporated in an operations and maintenance manual or control system.
7. Originator – the designated person or organization responsible for producing a submittal and submitting it to the QC Manager for review.
8. Preconstruction Submittals – submittals that are required prior to a notice to proceed on a new contract.
9. Product Data – catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work and samples of warranty language when the contract requires extended product warranties.
10. QC Manager – qualified person designated by the Design/Builder to oversee the design and construction QC program.
11. Shop Drawings – drawings, diagrams and schedules specifically prepared to illustrate some portion of the work. This includes diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Design/Builder for integrating the product or system into the project. Drawings prepared by or for the Design/Builder to show how multiple systems and interdisciplinary work will be coordinated.
12. Submittals – data normally submitted for review to establish conformance with the design concept and Contract Documents.
13. Test Reports – report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.) Report that includes findings of a test required to be performed by the Design/Builder on an actual portion of the work or prototype prepared for the project before shipment to job site. Report that includes finding of a test made at the job site on portion of work during or after installation.

14. Work – as used in this section, on- and off-site construction required by Contract Documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordination

1. Make submittals as required by the specifications.
2. Furnish submittals in addition to those specified to adequately describe the work covered in the respective sections.
3. Use the same units of weights and measures on submittals as those used in the Contract Drawings.
4. Ensure each submittal is complete and in sufficient detail to allow ready determination of compliance with contract requirements.
5. Furnish submittals that have been checked, approved, stamped, signed, and dated by the QC Manager, indicating action taken for each item.
6. Clearly identify proposed deviations from the Contract requirements.
7. Include applicable Design/Builder's, manufacturer's, or fabricator's drawings; descriptive literature in the form of catalog cuts, diagrams, operating charts or curves; test reports; O&M manuals (including parts list); certifications; warranties; and other such required submittals.
8. When Owner review is required, obtain Owner review prior to the acquisition of the material or equipment.

B. Scheduling

1. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential requirements to resubmit.
2. Except as specified otherwise, allow review period that includes sufficient working days for QC Manager's approval and an additional 15 working days for submittals requiring Owner review.
3. QC Manager review period begins when the QC Manager receives the submittal from the Originator. Owner review period begins when Owner receives the approved submittal from the QC Manager.
4. Period of review for each re-submittal is the same as for initial submittal.
5. No delay damages or time extensions will be allowed for time lost in late submittals.

1.04 SUBMITTALS

- A. Submittal Register
 - 1. Prepare the submittal register during the initial design stages of the project and indicate each design and construction submittal.
 - 2. Maintain an electronic version of the submittal register as work progresses.
 - 3. The Design Professional must assist the QC Manager in preparing the submittal register by determining each project submittal that requires Design Professional approval.
 - 4. The Design/Builder proposed submittal register format must include each type of information pertinent to the submittal process and be approved by the Owner prior to the first submission.

1.05 PROCEDURES FOR SUBMITTALS

- A. Reviewing, Certifying, Approving Authority
 - 1. Unless otherwise specified for a specific submittal, the QC Manager is responsible for reviewing and approving or certifying that submittals are in compliance with Contract requirements.
- B. Constraints
 - 1. Complete submittals for each definable feature of work. Submit components of definable feature interrelated as a system at the same time.
 - 2. Submittal will be returned without review when acceptability of the submittal is dependent on conditions, items, or materials included in separate subsequent submittals.
 - 3. Approval of a separate material, product, or component does not imply approval of assembly in which item functions.
- C. Variations
 - 1. Variations from Contract requirements require Owner review and will be considered where advantageous to Owner.
 - 2. Discuss how functional and quality requirements are met with the Owner prior to submission to minimize rejections and re-submittals.
 - 3. Proposing Variations
 - a. When proposing variation, deliver written request to the Owner with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Owner.
 - b. If lower cost is a benefit, also include an estimate of the cost saving.
 - c. In addition to documentation required for variation, include the submittals required for the item.
 - d. Clearly mark the proposed variation in each document.

4. Warranting That Variations Are Compatible
 - a. When delivering a variation for consideration, Design/Builder warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.
5. Review Schedule Is Modified
 - a. In addition to normal submittal review period, allow an additional period of 10 working days for consideration by Owner of submittals with variations.

D. Originator's Responsibilities

1. Determine and verify field measurements, materials, and field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the work and Contract Documents.
2. Transmit submittals in accordance with schedule on approved Submittal Register, and to prevent delays in the work, delays to Owner, or delays to separate Subcontractors.
3. Indicate variations as required by Paragraph VARIATIONS.
4. Correct and resubmit submittal as directed. When re-submittal is required, provide a copy of the original submittal, including reviewer comments. Direct specific attention in writing or on the submittal to revisions not requested by the reviewers on previous submissions.
5. Furnish additional copies of submittal when requested.
6. Complete work that must be accomplished as basis of a submittal in time to allow submittal to occur as scheduled.
7. Do not initiate work until submittals for that work have been returned as "Furnish As Submitted" or "Furnish As Corrected", except to the extent that a portion of work must be accomplished as basis of submittal.

E. QC Manager's Responsibilities

1. Note date submittal was received from Originator on each submittal.
2. Review each submittal and check and coordinate each submittal with requirements of Work and Contract Documents.
3. Review submittals for conformance with project design concepts and compliance with Contract Documents.
4. Advise Owner of variation, as required by Paragraph VARIATIONS.
5. Act on submittals, determining appropriate action based on review of submittal.
 - a. Take appropriate action on submittal from the possible actions defined in Paragraph ACTIONS POSSIBLE.

- b. When Owner review is required or a variation has been proposed, forward submittal to the Owner with certifying statement or return submittal to the Originator marked "Not Reviewed" or "Revise and Resubmit," as appropriate. The QC Manager's review of submittal determines appropriate action.
- 6. Ensure that material is clearly legible.
- 7. Stamp each sheet of each submittal with QC certifying statement or approving statement, except that data submitted in bound volume or on one (1) sheet printed on two (2) sides may be stamped on the front of the first sheet only.
 - a. Certify submittals forwarded to Owner with the following certifying statement:
 "I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with contract Number [____], is in compliance with the Contract Drawings and Specification, can be installed in the allocated spaces, and is submitted for Owner review.

 Certified by QC Manager _____, Date _____"
 (Signature)
 - b. QC Manager will use the following approval statement when returning submittals to Originator as "Approved" or "Approved as Noted."
 "I hereby certify that the (material) (equipment) (article) shown and marked in this submittal and proposed to be incorporated with contract Number [____], is in compliance with the Contract Drawings and Specification, can be installed in the allocated spaces, and is approved [as noted] for use.

 Approved by QC Manager _____, Date _____"
 (Signature)
- 8. Sign certifying statement or approval statement in original ink. Stamped signatures are not acceptable.
- 9. Update submittal register as submittal actions occur and maintain the submittal register at project site until final acceptance of work.
- 10. Retain a copy of approved submittals at project site.

F. Owner's Responsibilities

- 1. Note date on which submittal was received from QC Manager on each submittal requiring Owner's review.
- 2. Review submittals within scheduling period specified and only for conformance with project design concepts and compliance with Contract Documents.

3. Identify returned submittals with one of the actions defined in Paragraph ACTIONS POSSIBLE and with markings appropriate for action indicated.
- G. Actions Possible – Submittals will be returned with one of the following notations:
1. Submittals marked "Not Reviewed" will indicate submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by the QC Manager, or is not complete. A submittal marked "Not Reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by the QC Manager or for being incomplete, with appropriate action, coordination, or change.
 2. Submittals marked "Furnish as Submitted" authorize Design/Builder to proceed with work covered.
 3. Submittals marked "Furnish as Corrected" authorize Design/Builder to proceed with work as noted provided Design/Builder takes no exception to the notations.
 4. Submittals marked "Revise and Resubmit" indicate submittal is incomplete or does not comply with design concept or requirements of the Contract Documents and must be resubmitted with appropriate changes. Do not proceed with work for this item until re-submittal is reviewed and returned with an action of "Furnish as Submitted" or "Furnish as Corrected".
 5. Submittals marked "Rejected" indicate submittal does not comply with design concept or requirements of the Contract Documents. Do not proceed with work for this item until an entirely new submittal is made for review.

1.06 FORMAT OF SUBMITTALS

- A. Transmittal Form
1. Transmit each submittal to the QC Manager.
 2. Transmit submittals with transmittal form accepted by the Owner and standard for the project.
 3. On the transmittal form, identify the Originator, indicate date of submittal, and include information prescribed by the transmittal form and required in Paragraph IDENTIFYING SUBMITTALS.
- B. Identifying Submittals
1. Identify submittals with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form.
 2. Mark each copy of each submittal identically, with the following:

- a. Project title and location.
- b. Construction contract number.
- c. Section number of the specification section by which submittal is required.
- d. Submittal number of each component of submittal.
- e. When a resubmission, add alphabetic suffix on submittal description, for example, 10A, to indicate resubmission.
- f. Name, address, and telephone number of subcontractor, supplier, manufacturer and any other second tier Contractor associated with submittal.
- g. Product identification and location in project.

C. Format for Shop Drawings

1. Submit on not less than A4 (8 ½ by 11 inches, 297 by 210-mm) nor more than AO (30 by 42 inches, 1189 by 841 mm).
2. Present A4 (8 ½ by 11 inches, 297 by 210-mm) sized shop drawings as part of the bound volume for submittals required by section.
3. Present larger drawings in sets.
4. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in Paragraph IDENTIFYING SUBMITTALS.
5. Dimension drawings, except diagrams and schematic drawings. Prepare drawings demonstrating interface with other trades to scale. Use the same unit of measure for shop drawing dimensions as indicated on the Contract Drawings. Identify materials and products for work shown.
6. Indicate nameplate data, size and capacity, applicable federal, military, industry and technical society publication references.

D. Format of Product Data and Manufacturer's Instruction

1. Present product data submittals for each section as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.
2. Indicate, by prominent notation, each product that is being submitted. Indicate specification section number and paragraph number to which it pertains.
3. Supplement product data with material prepared for project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project, with information and format as required for submission of Certificates.
4. Provide product data in English unit dimensions. Where product data are included in preprinted catalogs with metric only, submit English unit dimensions on separate sheet.

5. Include the manufacturer's name, trade name, place of manufacture, catalog model or number and applicable federal, military, industry and technical society publication references. Submit manufacturer's data requiring supplemental information for clarification as specified for Certificates.
 6. Where equipment or materials are specified to conform to industry and technical society reference standards of the organizations such as American National Standards Institute (ANSI), ASTM International (ASTM), National Electrical Manufacturer's Association (NEMA), Underwriters Laboratories (UL), and Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance. In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and accepted by the Owner. State on the certificate that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.
 7. Submit manufacturer's instruction prior to installation.
- E. Format of Design Data and Certificates
1. Provide design data and certificates on 8 ½ by 11 inches (297 by 210-mm) paper. Provide a bound volume for submittals containing numerous pages.
- F. Format of Test Reports and Manufacturer's Field Reports
1. Provide reports on 8 ½ by 11 inches (297 by 210-mm) paper in a complete bound volume.
 2. Indicate by prominent notation, each report in the submittal. Indicate specification number and paragraph number to which it pertains.
- G. Format of O&M Data
1. Comply with the requirements specified in Section 01 78 00 – CLOSEOUT SUBMITTALS
- H. Format of Preconstruction Submittals and Closeout Submittals
1. When submittal includes a document that is to be used in the project or become part of project record, other than as a submittal, do not apply Design/Builder's approval stamp to the document, but to a separate sheet accompanying the document.
 2. Provide dimensions in administrative submittals in English units. Where data are included in preprinted material with metric only, submit English unit dimensions on separate sheet.

1.07 QUANTITY OF SUBMITTALS

- A. Number of Copies of Shop Drawings
 - 1. In addition to the number of copies necessary for Design/Builder use, submit one (1) copies of submittals of shop drawings requiring review and approval only by QC Manager and one (1) copies of shop drawings requiring Owner review.
- B. Number of Copies of Product Data and Manufacturer's Instructions
 - 1. Submit in compliance with quantity requirements specified for shop drawings.
- C. Number of Copies Design Data and Certificates
 - 1. Submit in compliance with quantity requirements specified for shop drawings.
- D. Number of Copies Test Reports and Manufacturer's Field Reports
 - 1. Submit in compliance with quantity with quality requirements specified for shop drawings.
- E. Number of Copies of O&M Data
 - 1. Submit two (2) copies of O&M Data for review.
- F. Number of Copies of Preconstruction Submittals and Closeout Submittals
 - 1. Unless otherwise specified, submit administrative submittals in compliance with quantity requirements specified for shop drawings.

1.08 SUBMITTAL CLASSIFICATION

- A. Action Submittal
 - 1. Owner review is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated in the Technical Specifications.
 - 2. Owner review and Owner approval is required for any deviations from the Solicitation or Accepted Proposal and other items as designated in the Technical Specifications.
- B. Informational Submittal
 - 1. Submittals not requiring Owner review will be for information only.
 - 2. Submittals for information only will generally not be returned.
 - 3. Owner reserves the right to require the Design/Builder to resubmit any item found not to comply with the Contract. This does not relieve the Design/Builder from the obligation to furnish material conforming to the plans and specifications; will not prevent Owner from requiring removal and replacement of nonconforming material incorporated in the work.

- C. Closeout Submittals
 - 1. Owner will review Closeout Submittals and O&M Data to verify the submittals comply with the Contract requirements. Submit data specified for a given item within 30 calendar days after the item is delivered to the site.
 - 2. In the event the Design/Builder fails to deliver Closeout Submittals and O&M Data within the time limits specified, the Owner may withhold from progress payments 50 percent of the price of the item with which such submittals are applicable.

1.09 ACCEPTED SUBMITTALS

- A. Do not construe submittals accepted as “Furnish as Submitted” or “Furnish as Corrected” as a complete check, but indicates only that the general method of construction, materials, detailing and other information are satisfactory design, general method of construction, materials, detailing and other information appear to meet the Solicitation and Accepted Proposal.
- B. Acceptance will not relieve the Design/Builder of the responsibility for any error which may exist, as the Design/Builder under the Design/Builder QC requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of the Work.
- C. After submittals have been accepted, no re-submittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.10 DISAPPROVED SUBMITTALS

- A. Make corrections required by Owner and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal.
- B. Re-submit "information only" submittals found to contain errors or unapproved deviations from the Solicitation or Accepted Proposal as one requiring "approval" action, requiring Owner approval.
- C. If the Design/Builder considers any correction indicated on the submittals to constitute a change to the contract, give prompt notice in accordance with the Contract to the Owner.

1.11 WITHHOLDING OF PAYMENT

- A. Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

- B. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.

Part 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Design quality control requirements.
 - 2. Construction quality control requirements.

1.02 REFERENCES

- A. Abbreviations and Acronyms
 - 1. CQC – Construction Quality Control
 - 2. DFOW – Definable feature(s) of work
 - 3. DQC – Design Quality Control
 - 4. QC – Quality Control
- B. Definitions
 - 1. Definable Feature(s) of Work – a task that is separate and distinct from other tasks and has control requirements and work crews unique to the task.
 - 2. QC Manager – qualified person designated by the Design/Builder to oversee the design and construction QC program.

C. Reference Standards

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

- 1. ASTM International (ASTM)
 - a. ASTM E329 Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

1.03 QC PROGRAM REQUIREMENTS

- A. Establish and maintain a QC program that is administered by a design and construction quality control organization, using quality control (design and construction) plans, commissioning plans and reports, meetings, a coordination

meeting, three phases of control, submittal review and approval, testing, completion inspections, and QC certifications and documentation necessary to provide design, materials, equipment, workmanship, fabrication, construction and operations that comply with the Contract requirements.

- B. Ensure the QC program covers work on and off the site.
- C. QC Plan Meeting
 - 1. Prior to submission of the QC Plan, the QC Manager may request a meeting with the Owner to discuss the QC Plan requirements.
 - 2. The purpose of this meeting is to develop a mutual understanding of the QC Plan requirements prior to plan development and submission and to agree on the Design/Builder's list of DFW.
- D. Develop a mutual understanding between the Design/Builder and QC personnel of the QC Plans, including documentation, administration, requirements and procedures, coordination of activities to be performed, and the coordination of the contractor's management, production and QC personnel. Explain in detail how the three phases of quality control will be implemented for each DFW.
- E. Design and Construction Quality Control Plans
 - 1. Provide a project specific DQC Plan and CQC Plan, for review and approval by the Owner.
 - 2. Do not perform design until the DQC Plan is approved and do not start construction until the CQC Plan is approved.
 - 3. Include the following in the plans:
 - a. QC organization chart including member resumes.
 - b. List of DFW including list of design submittal packaging.
 - c. Submittal Register including design submittals and noting submittals for Owner review.
 - d. Procedures for submitting and reviewing variations prior to submission to the Owner.
 - e. For the DQC Plan, a list of design subcontractors and the scope of the work which each firm will accomplish.
 - f. For the CQC Plan, a testing Plan, log and list of personnel and accredited laboratories that will perform tests.
 - i. As a part of the CQC plan, a statement of special inspections describing a complete list of materials and work requiring special inspections, the inspections to be performed and applicable quality assurance plans and structural observations. Include a listing of the individuals, approved agencies or firms that will be retained for conducting the required special inspections accompanied by a description of individual inspector's experience and a copy of required certifications. Conduct structural tests and special inspections, as outlined in Chapter 17 of the IBC, by individuals

and agents that are under the direct supervision of a Design Professional and meet the requirements of ASTM E329.

1.04 SUBMITTALS

Owner review is required for submittals designated as "Action Submittals". Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. Submit the following in accordance with Section 01 33 00.05 – DESIGN SUBMITTAL PROCEDURES and Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

- A. Action Submittals
 - 1. Design Quality Control (DQC) Plan
 - a. Submit a DQC Plan prior to the Post Award Kickoff Meeting.
 - 2. Construction Quality Control (CQC) Plan
 - a. Submit a Construction QC Plan prior to start of construction.
- B. Informational Submittals
Not Used
- C. Closeout Submittals
Not Used
- D. Maintenance Material Submittals
Not Used

1.05 QUALITY ASSURANCE

- A. Regulatory Requirements
 - 1. Comply with applicable federal, state and local laws, ordinances, rules and regulations, specifications and standards.
 - 2. References to laws, ordinances, rules and regulations, specifications and standards in the Contract Documents imply the latest issue in effect, including amendments and errata at the time proposals are taken, unless otherwise stated.
 - 3. Give necessary notices, obtain permits (except as otherwise noted) and pay governmental taxes, fees, and other costs in connection with the Work.
 - 4. File necessary plans, prepare documents and obtain necessary approvals of governmental departments having jurisdiction.
 - 5. Obtain required Certificates of Inspection and Approval for the work and deliver the same to the Owner, except as otherwise noted herein.

B. Qualifications

1. QC Manager

- a. Five (5) years of combined experience as a Superintendent, QC Manager, Project Manager, or Project Engineer on similar size and type construction contracts, and at least two years experience as a QC Manager.

1.06 QC ORGANIZATION

A. QC Manager

1. Designate a QC Manager to manage the QC organization
2. Ensure the QC Manager reports to an officer of the firm and is not subordinate to the Project Superintendent or the Project Manager.
3. QC Manager responsibilities:
 - a. Participate in construction and progress meetings.
 - b. Implement the "Three Phase of Control" for each DFOW and notify the Owner at least 3 business days in advance of each Preparatory and Initial Phase meeting. Submit respective checklists to the Owner the next business day.
 - c. Ensure that no construction begins before the design for that segment of work is finalized and construction submittals are approved as required.
 - d. Inspect work and rework to ensure its compliance with contract requirements. Maintain a rework log.
 - e. Immediately stop each segment of work that does not comply with the Contract requirements and direct the removal and replacement of defective work.
 - f. Remove each individual from the site who fails to perform their work in a skillful, safe, and workmanlike manner or whose work does not comply with the Contract plans and Specifications.
 - g. Ensure that design and construction submittals are reviewed and approved, as required by the Contract, prior to allowing material on site and work to proceed with these items. Maintain a submittal register.
 - h. Update As-built drawings daily, maintaining up-to-date set on site.
 - i. Maintain a testing plan and log. Ensure that testing is performed in accordance with the Contract. Review test reports and notify the Owner of deficiencies along with a proposal for corrective action.
 - j. Maintain rework log on site, noting dates deficiency identified, and date corrected.
 - k. Certify and sign statement on each invoice that work to be paid under the invoice has been completed in accordance with contract requirements.
 - l. Perform Punch-out and participate in Pre-final and Final acceptance Inspections. Submit list of deficiencies to the Owner

for each inspection. Ensure each deficiency is corrected prior to the Final inspection. Notify Owner prior to final inspection to establish a schedule date acceptable by the Owner.

- m. Ensure that each required key, operation and maintenance manual, warranty certificate, and that the as-built drawings are correct and complete, in accordance with the contract, and submitted to the Owner.
- n. Assure that applicable and required tests, special inspections, and observations are performed.
- o. Coordinate factory and on-site testing, testing laboratory personnel, QC specialists, and other required inspection and testing personnel.
- p. Notify the Owner of proposed changes to the QC plan.
- q. Retain a copy of approved submittals at project site.

1.07 TESTING OF MATERIALS

- A. Perform required testing. The Owner retains the right to perform additional tests on materials and equipment.
- B. Submit materials for testing, taking into consideration when the materials will be incorporated in the work and the capabilities and capacities of the testing laboratory.
- C. Furnish to the Owner duplicate certified copies of routine tests made by the shop or factory where material or equipment has been fabricated or manufactured for the project.
- D. Perform tests specified or required to verify that control measures are adequate to provide a product that conforms to the Specifications. Testing includes operation and acceptance tests when specified.
- E. Perform the following activities and record and provide the following data:
 - 1. Verify that testing procedures comply with contract requirements.
 - 2. Verify that facilities and testing equipment are available and comply with testing standards.
 - 3. Check test instrument calibration data against certified standards.
 - 4. Verify that recording forms and test identification control number system, including test documentation requirements, have been prepared
 - 5. Record tests, both passing and failing, taken on the QC report for the date taken. Include specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. Actual test reports for tests performed off-site may be submitted later with a reference to the test number and date taken.

F. Test Results

1. Cite applicable Contract requirements, tests or analytical procedures used.
2. Provide actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. If the item fails to conform, notify the Owner immediately.
3. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable.
4. Ensure a testing laboratory representative authorized to sign certified test reports signs the test results.
5. Furnish the signed reports, certifications, and other documentation to the Owner via the QC Manager.
6. Failure to submit timely test reports, as stated, may result in nonpayment for related work performed and disapproval of the test facility for this contract.

1.08 QC CERTIFICATIONS

A. Contractor Quality Control Report Certification

1. Include the following statement on each daily report: "On behalf of the Design/Builder, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report."

B. Invoice Certification

1. Furnish a certificate to the Owner with each payment request, signed by the QC Manager, attesting that as-built drawings are current and attesting that the work for which payment is requested, including stored material, is in compliance with contract requirements.

C. Completion Certification

1. Upon completion of work under this contract, furnish a certificate from the QC Manager to the Owner attesting that "the work has been completed, inspected, tested and is in compliance with the contract."

1.09 DOCUMENTATION

A. Records

1. Maintain current records of on-site and off-site QC operations, activities, and tests performed, including the work of subcontractors and suppliers.

2. Furnish records on an acceptable form and include factual evidence that required QC activities and/or tests have been performed.
3. Furnish records covering both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the Contract.
4. Use terminology consistent with the construction schedule for reporting of work.
5. Include pertinent information in the "remarks" section of reports including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors to the work site.
6. For each remark given, identify the Schedule Activity Number that is associated with the remark.

B. As-Built Drawings

1. Review the as-built drawings required by Section 01 78 00 – CLOSEOUT SUBMITTALS, keep as-built drawings current on a daily basis and mark to show deviations that have been made from the Contract Drawings.
2. Ensure each deviation has been identified with the appropriate modifying documentation number.
3. Initial each deviation or revision.
4. Upon completion of work, submit a certificate attesting to the accuracy of the as-built drawings prior to submission to the Owner.

1.10 NOTIFICATION OF NONCOMPLIANCE

- A. The Owner will notify the Design/Builder of each detected noncompliance with the foregoing requirements.
- B. Immediately take corrective action after receipt of such notice.
- C. Such notice, when delivered to the Design/Builder at the site of the work, will be deemed sufficient for the purpose of notification.
- D. Failure or refusal to comply promptly might be basis for the Owner to issue an order stopping all or part of the work until satisfactory corrective action has been taken.
- E. Such stop orders will not be considered basis for a Design/Builder claim for extension of time or for excess costs or damages.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Temporary construction facilities, utilities, and controls including access roads during construction, parking requirements, and temporary buildings.

1.02 REFERENCES

A. Abbreviations and Acronyms

1. OSHA – Occupational Safety and Health Administration

B. Reference Standards

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

1. American National Standards Institute (ANSI)
 - a. ANSI/ISEA Z308.1 Minimum Requirements for Workplace First Aid Kits and Supplies
2. U.S. National Archives and Records Administration (NARA)
 - a. 29 CFR 1910.151b Medical Services and First Aid
 - b. 29 CFR 1926 Safety and Health Regulations for Construction
 - c. 29 CFR 1926.51 Sanitation
 - d. 29 CFR 1926.56 Illumination

1.03 ADMINISTRATIVE REQUIREMENTS

Not Used

1.04 SUBMITTALS

Not Used

1.05 PARKING

- A. When site space is not adequate, provide additional off-site parking.

1.06 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Protect vehicular traffic, stored materials, site, and structures from damage.

1.07 TEMPORARY ELECTRICITY AND LIGHTING FOR CONSTRUCTION

- A. Comply with National Electric Code, Federal, State, and local codes and regulations, and utility company requirements.
- B. Complement existing power service capacity and characteristics as required. Determine actual power requirements associated with site work activities and arrange with the local utilities for installation and service of additional supply. Coordinate with the Power Company to assure that the system is sufficient and adequate for temporary power needs and that existing power lines and poles are relocated to accommodate excavation and other construction activities.
- C. Installation: use personnel familiar with code requirements and qualified for the work to be performed. Install circuit and branch wiring with area distribution boxes located so that power and lighting are available, if required, throughout the construction site by the use of construction-type power cords. Guard, bury, or isolate by elevation temporary wiring to prevent accidental contact by equipment.
- D. Grounding System: protect circuits with ground fault interrupters.
- E. Lighting: Maintain lighting and provide routine repairs. Provide adequate artificial lighting for work areas when natural light is not adequate for work. Light work areas to not less than the minimum illumination intensities listed in OSHA Standard 29 CFR 1926.56.

1.08 TEMPORARY HEATING, COOLING, AND VENTILATION

- A. Provide heating, cooling, and ventilation devices and heat, cool, and ventilate as needed to maintain specified conditions for construction operations.
- B. Prior to operation of equipment for temporary heating, cooling, or ventilation purposes, verify installation is approved for operation, equipment is lubricated, and filters are in place. Provide for operation, maintenance, and regular replacement of filters and worn or consumed parts.

- C. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- D. Utilize existing ventilation equipment. Extend and supplement equipment with temporary fan units as required to maintain clean air for construction operations.

1.09 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to prevent damage.
- C. Prohibit traffic from landscaped areas.

1.10 SECURITY

- A. Provide supplemental security and facilities to protect the Work and Design/Builder's operations from unauthorized entry, vandalism, or theft.
- B. Contact the local emergency response agencies to ascertain the type of response required to potential emergency situations associated with the work and to coordinate the responses of the various units.
- C. Prepare a list of emergency points of contact, telephone numbers, radio frequencies, and call signs so that dependable responses can be executed.
- D. Maintain program throughout construction period until Owner acceptance precludes the need for Design/Builder security.
- E. Restrict entrance of persons and vehicles into Project site. Allow entrance only to authorized persons with proper identification.
- F. Maintain a list of accredited persons; submit copy to Owner on request.
- G. Require personnel to sign in upon entering the site and to sign out when leaving.
- H. Minimize personnel on-site. Ensure off-duty personnel leave the site as soon as possible.
- I. Do not allow visitors without the approval of the Owner, except for properly identified regulatory personnel.
- J. Do not permit visitors to enter active work areas without the expressed permission of the Owner.
- K. Maintain log of visitors that includes name, affiliation, and purpose of visit. Make available to Owner on request.

- L. Require signature of visitors on a form relieving Owner and the RPR of the liability of any consequences related to potential hazards associated with the site.

1.11 REMOVAL OF FACILITIES, UTILITIES AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials prior to Final inspection.
- B. Remove underground installations to a minimum depth of 2 feet below final grade. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary Work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
- E. Structures, office trailers, or other Owner property that was utilized during the project will remain on site unless other arrangements are made between the Design/Builder and Owner.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Product transportation, handling, storage, protection, and support requirements.

1.02 REFERENCES

- A. Definitions
1. Product – new material, machinery, components, equipment, fixtures, and systems forming the Work, excluding machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
1. Coordinate the delivery and installation of products with the Work of other sections.
 2. Electrical Interface: Install or mount electrical components or apparatus as required for the equipment specified.
 3. Start-up and testing: Coordinate start-up and testing with work of other sections and ensure that required utilities and water supply are available.

1.04 SUBMITTALS

Owner review is required for submittals designated as “Action Submittals”. Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. The following shall be submitted in accordance with Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

- A. Action Submittals
Not Used

- B. Informational Submittals
 - 1. Qualification Statements
 - a. Qualification of Manufacturer Representative
- C. Closeout Submittals
 - Not Used
- D. Maintenance Material Submittals
 - Not Used

1.05 QUALITY ASSURANCE

- A. Qualifications
 - 1. Manufacturer Representative
 - a. Endorsed by the product manufacturer to review installation, perform pre-start-up checks, start-up, test, adjust, demonstrate, and provide instruction for the product.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Delivery and Acceptance Requirements
 - 1. Transport products in accordance with supplier and manufacturer written instructions.
 - 2. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged. Do not offload damaged products. Return damaged products to manufacturer.
 - 3. Unload with minimum handling. Provide special lifting harness or apparatus as required by manufacturer to unload products.
- B. Storage and Handling Requirements
 - 1. Handle products in accordance with supplier and manufacturer written instructions to prevent soiling, disfigurement, or damage.
 - 2. Store and protect products in accordance with manufacturer instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.
 - 3. Place fabricated products for exterior storage on sloped supports, above ground.
 - 4. Provide off-site storage and protection when on-site storage or protection is not available or allowed.
 - 5. Cover products subject to deterioration with appropriate covering to prevent damage.

6. Arrange storage of products to allow access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.
- C. Packaging Waste Management
1. When possible, furnish products with minimal and easily recyclable packaging and use manufacturers with policies that take back product packaging.
 2. Dispose of product packaging in accordance with applicable Laws and Regulations.

1.07 PRODUCT OPTIONS

- A. Products specified by reference standards or by description only: Any product meeting those standards or description.
- B. Products specified by naming one or more manufacturer: Products of manufacturer(s) named and meeting specifications, no options or substitutions allowed.
- C. Products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not named.
- D. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- E. Provide interchangeable components of the same manufacturer for similar components.

1.08 SUBSTITUTIONS

- A. The products specified establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
- B. Submit written request for approval for each proposed substitution at least ten (10) days prior to the date for receipt of Proposals. Substitutions received by Owner after this time will not be considered.
- C. Include the following in proposed substitution requests:
 1. Name of the product that substitution is requested for.
 2. A complete description of the proposed substitute including drawings, cut sheets, performance and test data and other information necessary for an evaluation.
 3. A statement setting forth changes in other materials, equipment or Work that incorporation of the substitute would require.

- D. The burden of proof of the merit of the proposed substitute is upon the Proposer. The Owner's decision of approval or disapproval of a proposed substitution is final. If Owner approves proposed substitution, such approval will be set forth in an Addendum issued to each prospective Proposer. Do not rely upon approvals made in any other manner.
- E. After submitting proposal, substitutions may be considered when a product becomes unavailable through no fault of the Design/Builder by following the procedure described in the following paragraphs.
- F. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- G. A request constitutes a representation that the Proposer:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the Substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work, which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension, which may subsequently become apparent.
- H. Substitutions will not be considered when they are indicated or implied on product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- I. Substitution Submittal Procedure:
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit supporting documentation demonstrating the proposed product equivalence.
 - 3. The Owner will notify Proposer, in writing, of decision to accept or reject request prior to closing date for proposals.

1.09 INSTALLATION REQUIREMENTS

- A. Check each dimension indicated immediately after award of the Contract. Advise the Owner promptly of discrepancies or interference and obtain such measurements and information as may be required to satisfactorily install the work.
- B. Verify that each measurement is correct before ordering material or doing work. Submit differences found between field measurements and those indicated

promptly to the Owner for adjustment and approval before proceeding with the work.

- C. Verify that site conditions are ready to receive the Work.
- D. Verify that required utilities are available and of the correct characteristics.
- E. Align, level and adjust equipment for satisfactory operation and ease of access for operations and maintenance.
- F. Install products in accordance with manufacturer written instructions and recommendations.
- G. In the event that installation requirements need clarification as to Contract responsibility, Owner will be final judge in delineation of responsibility. In no case will need for clarification result in extension of Contract Time or change in Contract Price.

1.10 MANUFACTURER'S REPRESENTATIVE

- A. Provide qualified Manufacturer Representative to review product installation, perform pre-start-up checks, start-up, and test, adjust and demonstrate the product and provide written certification that product and its installation meet manufacturer recommendations and comply with the Technical Specifications.
- B. Provide services of Manufacturer Representative for the minimum period of time indicated in the Technical Specification for each product. Times indicated do not include travel time. Extend time as necessary to correct deficiencies and retest. Provide time for instruction in addition to hours provided for start-up, testing, correction of deficiencies, and demonstrations during non-instructive time. Time spent in these other activities will not be considered training hours.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 71 00

EXAMINATION AND PREPARATION

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Mobilization
 - 2. Acceptance of conditions
 - 3. Field engineering

1.02 REFERENCES

- A. Definitions
 - 1. Demobilization – disassembly and removal from the site of equipment, tools, materials, and supplies that are not incorporated in the Work, restoration on of the work area, and services preparatory to close out of the Work.
 - 2. Mobilization – assembly and delivery to the site of equipment, tools, materials, and supplies necessary for the prosecution of work that are not intended to be incorporated in the Work, preparation of the work area, and services preparatory to commencement of the Work.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination
 - 1. Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
 - 2. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.04 SUBMITTALS

Owner review is required for submittals designated as “Action Submittals”. Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. The following shall be submitted in accordance with Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

- A. Informational Submittals
 - 1. Field Quality Control Submittals
 - a. Submit documentation to verify the accuracy of field engineering work upon the request of the Owner.
 - 2. Special Procedure Submittals
 - a. Submit copies of original field notes, computations, and other survey records to the extent necessary to determine the proper amounts of progress and final payments to the Owner.
 - 3. Qualification Statements
 - a. Submit name, address, and telephone number of Surveyor and Engineers before starting Work, when applicable.
- C. Closeout Submittals
 - 1. Record Documentation
 - a. Record drawings to be used for determining Work quantities and documenting construction.
- D. Maintenance Material Submittals
Not Used

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Delivery and Acceptance Requirements
 - 1. Deliver construction tools, equipment, temporary buildings, materials and supplies to the site in conformance with local governing ordinances and regulations.

1.06 FIELD CONDITIONS

- A. Existing Conditions
 - 1. Investigate and verify the existence and location of mechanical and electrical systems, underground utilities, and other construction affecting the Work.

1.07 MOBILIZATION AND DEMOBILIZATION

- A. Provide construction tools, equipment, materials, and supplies of the types and quantities necessary to facilitate the timely execution of the Work.
- B. Provide personnel, products, construction materials, equipment, tools, and supplies at the site at the time they are scheduled to be installed or utilized.
- C. Remove construction tools, apparatus, equipment mobile units and buildings, unused materials and supplies, plant, and personnel from the site upon completion of the Work.

- D. Restore areas utilized for mobilization to their original, natural state, or as indicated in the Contract Documents.

1.08 ACCEPTANCE OF CONDITIONS

- A. Examine substrates, areas, and conditions with installer or applicator present for compliance with requirements for installation tolerances and other conditions affecting performance; record observations.
- B. Submit a written report listing conditions detrimental to performance of the Work that includes the following:
 - 1. Description of the Work.
 - 2. List of detrimental conditions, including substrates.
 - 3. List of unacceptable installation tolerances.
 - 4. Recommended corrections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

1.09 PREPARATION

- A. Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication.
- B. Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Owner. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

1.10 CONSTRUCTION LAYOUT

- A. Before proceeding to lay out the Work, verify layout information shown on Drawings. Notify Owner promptly if discrepancies are discovered.
- B. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
- C. Notify Owner when deviations from required lines and levels exceed allowable tolerances.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 74 00
CLEANING AND WASTE MANAGEMENT

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Progress cleaning.
 - 2. Site maintenance.
 - 3. Waste management.
 - 4. Final cleaning.

1.02 REFERENCES

- A. Reference Standards

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

- 1. U.S. National Archives and Records Administration (NARA)
 - a. 29 CFR 1926 Safety and Health Regulations for Construction

1.03 ADMINISTRATIVE REQUIREMENTS

Not Used

1.04 SUBMITTALS

Not Used

1.05 SITE MAINTENANCE

- A. Provide periodic maintenance for office and storage areas.

1.06 WASTE MANAGEMENT

- A. Remove waste material dumped in unauthorized areas and restore the area to the condition of the adjacent undisturbed areas.
- B. Remove material for disposal from the site in accordance with applicable Laws and Regulations.

- C. Do not remove material from the site without written permission from the Owner.
- D. Do not burn material associated with the project.

1.07 FINAL CLEANING

- A. Execute final cleaning prior to final acceptance inspection.
- B. Leave premises "broom clean."
- C. Disconnect and remove temporary utilities in accordance with Section 01 50 00 – TEMPORARY FACILITIES AND CONTROLS.
- D. Dismantle and properly dispose of temporary facilities in accordance with Section 01 50 00 – TEMPORARY FACILITIES AND CONTROLS.
- E. Remove waste and surplus materials, rubbish and construction facilities from the site.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 77 00
CLOSEOUT PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Contract closeout procedures.

1.02 REFERENCES

Not Used

1.03 ADMINISTRATIVE REQUIREMENTS

Not Used

1.04 SUBMITTALS

Owner review is required for submittals designated as “Action Submittals”. Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. The following shall be submitted in accordance with Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

- A. Action Submittals
 - Not Used
- B. Informational Submittals
 - 1. Certificates
 - a. Certification that Contract Documents are complete and ready for Owner review.
 - 2. Special Procedure Submittals
 - a. Punch-Out Inspection Punch List.
 - b. Notice to schedule the Pre-final Inspection.
 - c. Notice to schedule the Final Acceptance Inspection.
 - d. Release of Liens and Claims.
- C. Closeout Submittals
 - Not Used
- D. Maintenance Material Submittals

Not Used

1.05 COMPLETION INSPECTIONS

A. Punch-Out Inspection

1. Inspect the work and develop a punch list of items that do not conform to the approved drawings and specifications. Schedule near the completion of Work or any increment thereof established by a completion time stated in the Contract or stated elsewhere in the specifications. Ensure QC Manager has reviewed and signed the punch list.
2. Include in the punch list each remaining item requiring rework that was not corrected prior to the Punch-Out Inspection.
3. Include the estimated date that the deficiencies will be corrected on the punch list.
4. Submit a copy of the punch list to the Owner.
5. Complete additional inspections to ascertain that each deficiency has been corrected. Once this is accomplished, notify the Owner that the facility is ready for the "Pre-Final Inspection".

B. Pre-Final Inspection

1. The Owner will perform this inspection to verify that the facility is complete and ready to be occupied.
2. The Owner may develop a pre-final punch list as a result of this inspection.
3. Ensure that each item on this list is corrected prior to notifying the Owner that a "Final" inspection can be scheduled.
4. Correct items noted on the "Pre-Final" inspection in a timely manner and prior to the contract completion date for the work or particular increments thereof if the project is divided into increments by separate completion dates.

C. Final Acceptance Inspection

1. Notify the Owner at least 14 days prior to the desired Final Acceptance Inspection date.
2. State in the notice that specific items previously identified to the Contractor as being unacceptable will be complete by the date scheduled for the final acceptance inspection.
3. The Owner will formally schedule the Final Acceptance Inspection based upon results of the "Pre-Final Inspection".
4. The QC Manager, the superintendent, or other Design/Builder management personnel must attend the Final Acceptance Inspection. The

Owner will attend this inspection. Additional Owner personnel may attend at their discretion.

5. Failure to have contract work acceptably complete for this inspection will be cause for the Owner to bill the Contractor for additional inspection cost in accordance with the Contract.

1.06 CLOSEOUT PROCEDURES

- A. Owner will occupy the site as specified.
- B. Conduct completion inspections, including Pre-final and Final Acceptance Inspections.
- C. Submit draft project record documents to Owner for review in accordance with Section 01 78 00 – CLOSEOUT SUBMITTALS
- D. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Owner review.
- E. Execute warranty documents in accordance with Section 01 78 00 – CLOSEOUT SUBMITTALS.
- F. Owner will return reviewed draft project record documents to Contractor for revisions as specified in Section 01 78 00 – CLOSEOUT SUBMITTALS.
- G. Complete demobilization and remove temporary utilities, facilities, and controls as specified in Section 01 50 00 – TEMPORARY FACILITIES AND CONTROLS.
- H. Submit final project record documents and warranty information to Owner in accordance with Section 01 78 00 – CLOSEOUT SUBMITTALS.
- I. Submit Release of Liens and Claims from each Subcontractor and Supplier.
- J. Submit final Application for Payment requesting release of retainage and identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- K. Owner will conduct Final Application for Payment inspection to confirm demobilization is complete and acceptable.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 78 00
CLOSEOUT SUBMITTALS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Record Documents and document maintenance.
 - 2. Warranties.

1.02 REFERENCES

Not Used

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Prepare, maintain and submit project record documents as required by the Specifications.
- B. Maintain one (1) bound sets of the following record documents:
 - 1. Drawings
 - a. Contract Drawings as issued for construction
 - b. As-built (red line) drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other modifications to the Contract
 - 5. Reviewed Submittals and Record Submittal Schedule
 - 6. Record schedule
 - 7. Survey notes, records, and calculations
 - 8. Field orders and written instructions
 - 9. Progress reports including required attachments
 - 10. Spill incident reports
 - 11. Manufacturer's instruction for assembly, installation, and adjusting
 - 12. Daily Work Activity Summary Reports
- C. Record actual revisions to the Work concurrent with construction progress.
- D. Ensure entries are complete, legible, and accurate, enabling future reference.

- E. Maintain documents in a clean, dry, legible condition in good order.
- F. Do not use record documents for work purposes.
- G. Make documents available continuously for inspection by the Owner. Bring one (1) copy of the current as-built drawings to every other progress meeting for the Owner to review.

1.04 SUBMITTALS

Owner review is required for submittals designated as "Action Submittals". Submittals not designated as "Action Submittals" are for Design/Builder Quality Control approval and are to be submitted to Owner for information only. The following shall be submitted in accordance with Section 01 33 00.07 – CONSTRUCTION SUBMITTAL PROCEDURES:

A. Action Submittals

1. Draft Submittal

- a. Submit one (1) draft copy of completed record documents including as-built (red line) drawings to the Owner following Substantial Completion of construction and at least 15 days prior to the Final Acceptance Inspection.
- b. Ensure the draft record documents are neat, legible, and accurate.
- c. If upon review, the draft record drawings are found to contain errors and/or omissions, they will be returned to the Design/Builder for corrections. Complete the corrections and return the draft record documents to the Owner within 10 calendar days.
- d. One (1) copy of the approved draft record documents with Owner comments will be returned to the Contractor after the Final Acceptance Inspection for use in preparation of final record documents.

B. Informational Submittals

Not Used

C. Closeout Submittals

1. Operation and Maintenance Data

- a. Provide one (1) hard copy and one (1) electronic copy of operation and maintenance instructions, arranged by system and subdivided by specification section.
- b. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers.
- c. Identify the following:
 - 1) Significant design criteria.
 - 2) List of equipment.

- 3) Parts list for each component.
 - 4) Operating instructions.
 - 5) Maintenance instructions for equipment and systems.
 - 6) Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
2. Warranty Documentation
 - a. Equipment/Product Warranty List
 - b. Provide one (1) set of notarized copies of warranties required in individual Specification sections.
 3. Record Documentation
 - a. Submit final record documents to Owner with final Application for Payment.
- D. Maintenance Material Submittals
1. Label and deliver spare parts, and maintenance items to the site. Deliver extra materials to the site only with authorization from property Owner. Place in locations as directed.
 - a. Include “NOT FOR WARRANTY REPAIRS” on the labels.
 - b. Obtain receipt prior to final payment.
 2. Do not use the spare parts and maintenance materials required by the Contract Documents to remedy defects during the warranty period except when approved otherwise by authorized facility representative. In such cases, replace items used.
 3. Furnish the names, business addresses, and telephone numbers of fully equipped authorized service organizations.
 4. Applications for final payment will not be approved until these items are delivered.

1.05 RECORD DOCUMENTS

- A. Specifications
1. Legibly mark and record at each product reference the description of actual Products installed, including the following:
 - a. Manufacturer's name and product model and number
 - b. Product substitutions or alternates utilized
 - c. Changes made by Addenda and modifications. Include reference to approved Work Change Directive or Change Order.
 2. Legibly mark and record changes to execution methods specified. Include reference to approved Work Change Directive.
- B. Design/Builder's Pre-Construction Submittals

1. Legibly mark and record alternate vendors and subcontractors used.
 2. Legibly mark and record changes to the Submittal Register including:
 - a. Date of submittal
 - b. Date submittal was approved
 - c. Additional submittals required
 3. Legibly mark and record changes to the following:
 - a. DQC Plan
 - b. CQC Plan
- C. Manufacturer's instruction for assembly, installation, and adjusting
1. Legibly mark and record variances from Manufacturer's instructions, including the following:
 - a. Description of variance
 - b. Reason for variance
 - c. Effect of variance on manufacturer's guarantee or warranty
 - d. Additional considerations or procedures required due to variance
 2. Provide correspondence regarding Manufacturer's recommendations in support of or against the variance.

1.06 RECORD DRAWINGS

- A. Keep record drawings current and available on the job site at all times, one (1) set of marked drawings (paper prints) showing as-built conditions.
- B. Accurately and neatly record changes from the Contract Plans that are made in the Work or additional information that might be uncovered in the course of construction as they occur by means of details and notes.
- C. Legibly mark drawings to record actual construction, including:
 1. Field changes of dimension and detail including:
 - a. Design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to, fabrication, installation plans and placing details, pipe sizes, etc.
 2. Changes made by Field Order or by Change Order.
 3. Details not on original Contract Drawings.
 4. Changes or modifications that result from the final inspection.
 5. Show only the option selected for construction on the as-built drawings where Contract Drawings or specifications allow options.

1.07 WARRANTY REQUIREMENTS

- A. Equipment/Product Warranty List

1. Submit a bound and indexed notebook containing written warranties for equipment/products furnished and prepare a complete listing of such equipment/products.
2. State the specification section applicable to the equipment/product, duration of the warranty, start date of the warranty, ending date of the warranty, and the point of contact for fulfillment of the warranty.
3. Start the warranty period on the same date as project acceptance and continue for the full product warranty period.
4. Execute the full list and submit prior to final acceptance of the facility.

B. Equipment Warranty Tags and Guarantor's Local Representative

1. Submit with each warranty the name, address, and telephone number of the guarantor's representative nearest to the location where the equipment and appliances are installed.
2. Ensure the guarantor's representative will honor the warranty during the warranty period, and will provide the services prescribed by the terms of the warranty.
3. At the time of installation, tag each item of warranted equipment with a durable, oil- and water-resistant tag.
4. Attach tag with copper wire and spray with a clear silicone waterproof coating.
5. Leave the date of acceptance and QC's signature blank until project is accepted for beneficial occupancy.
6. Show the following information on each tag:

EQUIPMENT/PRODUCT WARRANTY TAG	
Type of Equipment/Product _____	
Warranty Period _____	From _____ To _____
Contract No. _____	
Inspector's Signature _____	Date Accepted _____
Construction Contractor:	
Name: _____	
Address: _____	
Telephone: _____	
Warranty Contact: _____	
Name: _____	
Address: _____	
Telephone: _____	
OWNER PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE	

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

APPENDIX A

CYBER SECURITY CONSIDERATIONS

The National Institute of Standards and Technology (NIST) Cyber-Security Framework
Feb 2024

1.0 PROTECT

1. **Identity Management, Authentication, and Access Control:** Access to physical and logical assets is limited to authorized users, services, and hardware and managed commensurate with the assessed risk of unauthorized access.
 - a. Identities and credentials for authorized users, services and hardware are managed by the organization.
 - b. Identities are proofed and bound to credentials based on the context of interactions.
 - c. Users, services, and hardware are authenticated.
 - d. Identity assertions are protected, conveyed and verified.
 - e. Access permissions, entitlements, and authorizations are managed, enforced, and reviewed, and incorporate the principles of least privilege and separation of duties.
 - f. Physical access to assets is managed, monitored, and enforced commensurate with risk.
2. **Data Security:** Data are managed to protect the confidentiality, integrity, and availability of information.
 - a. The confidentiality, integrity, and availability of data-at-rest are protected.
 - b. The confidentiality, integrity, and availability of data-in-transit are protected.
 - c. The confidentiality, integrity, and availability of data-in-use are protected.
 - d. Backups of data are created, protected, maintained, and tested.
3. **Platform Security:** The hardware, software (e.g., firmware, operating systems, applications), and services of physical and virtual platforms are managed to protect their confidentiality, integrity, and availability.
 - a. Configuration management practices are established and applied.
 - b. Software is maintained, replaced, and removed commensurate with risk.
 - c. Hardware is maintained, replaced, and removed commensurate with risk.
 - d. Log records are generated and made available for continuous monitoring.
 - e. Installation and execution of unauthorized software are prevented.
 - f. Secure software development practices are integrated, and their performance is monitored throughout the software development life cycle.
4. **Technology Infrastructure Resilience:** Security architectures are managed to protect asset confidentiality, integrity, and availability, and organizational resilience.
 - a. Networks and environments are protected from unauthorized logical access and usage.
 - b. The organization's technology assets are protected from environmental threats.

- c. Mechanisms are implemented to achieve resilience requirements in normal and adverse situations.
- d. Adequate resource capacity to ensure availability is maintained.

2.0 DETECT

1. **Continuous Monitoring:** Assets are monitored to find anomalies, indicators of compromise, and other potentially adverse events.
 - a. Networks and network services are monitored to find potentially adverse events.
 - b. The physical environment is monitored to find potentially adverse events.
 - c. Personnel activity and technology usage are monitored to find potentially adverse events.
 - d. External service provider activities and services are monitored to find potentially adverse events.
 - e. Computing hardware and software, runtime environments, and their data are monitored to find potentially adverse events.
2. **Adverse Event Analysis:** Anomalies, indicators of compromise, and other potentially adverse events are analyzed to characterize the events and detect cybersecurity incidents.
 - a. Potentially adverse events are analyzed to better understand associated activities.
 - b. Information is correlated from multiple sources.
 - c. The estimated impact and scope of adverse events are understood.
 - d. Information on adverse events is provided to authorized staff and tools.
 - e. Cyber threat intelligence and other contextual information are integrated into the analysis.
 - f. Incidents are declared when adverse events meet the defined incident criteria.

3.0 RESPOND

1. **Incident Management:** Responses to detected cybersecurity incidents are managed.
 - a. The incident response plan is executed in coordination with relevant third parties once an incident is declared.
 - b. Incident reports are triaged and validated.
 - c. Incidents are categorized and prioritized.
 - d. Incidents are escalated or elevated as needed.
 - e. The criteria for initiating incident recovery are applied.
2. **Incident Analysis:** Investigations are conducted to ensure effective response and support forensics and recovery activities.
 - a. Analysis is performed to establish what has taken place during an incident and the root cause of the incident.
 - b. Actions performed during an investigation are recorded, and the records' integrity and provenance are preserved.
 - c. Incident data and metadata are collected, and their integrity and provenance are preserved.
 - d. An incident's magnitude is estimated and validated.

3. **Incident Response Reporting and Communication:** Response activities are coordinated with internal and external stakeholders as required by laws, regulations, or policies.
 - a. Internal and external stakeholders are notified of incidents.
 - b. Information is shared with designated internal and external stakeholders.
4. **Incident Mitigation:** Activities are performed to prevent expansion of an event and mitigate its effects.
 - a. Incidents are contained.
 - b. Incidents are eradicated.

4.0 RECOVER

1. **Incident Recovery Plan Execution:** Restoration activities are performed to ensure operational availability of systems and services affected by cybersecurity incidents.
 - a. The recovery portion of the incident response plan is executed once initiated from the incident response process.
 - b. Recovery actions are selected, scoped, prioritized, and performed.
 - c. The integrity of backups and other restoration assets is verified before using them for restoration.
 - d. Critical mission functions and cybersecurity risk management are considered to establish post-incident operational norms.
 - e. The integrity of restored assets is verified, systems and services are restored, and normal operating status is confirmed.
 - f. The end of incident recovery is declared based on criteria, and incident-related documentation is completed.

APPENDIX B
WELL OPERATIONS

The overall theme of our well programming is that the well will be able to function in VFD or by-pass mode even with the loss of the PLC. We use relay logic to obtain this functionality.

1: Chemical feed pump receptacles should only be energized while well is running in VFD or by-pass mode and the flow switch indicates flow, even when the PLC is not functioning. This run indication should also be transmitted to the MTU via the RTU.

2: Chlorine analyzer should shut the well down, after an adjustable time delay, when there is a loss of chlorine. This should occur with VFD and by-pass mode even when the PLC is not functioning. An analog output, indicating residual level, should be transmitted to the MTU via the RTU.

3: Level transducer is an analogue input on PLC. An associated level alarm signal should be wired in series with the chlorine analyzer circuit. This will enable the transducer to shut down the well at a programmed level when in VFD or by-pass mode even when the PLC is not functioning.

4: Analogue output will be needed for PLC control of VFD frequency. This control is calculated at the MTU and is based on tank levels received at the MTU. The resultant analog signal is transmitted to the well VFD via the RTU.

5: Flow meter should generate the 4-20ma signal to flow pace chemical feed pumps. This method allows the feed pumps to operate smoothly in both VFD and by-pass mode, even when the PLC is not functioning. The flow rate indication should also be transmitted back to the MTU via the RTU.

6: A motor starter auxiliary contact in series with flow switch will energize chemical feed pump receptacles (both outlets). This relay logic utilizes the physical relay to build a permissive circuit which prevents the chemical pumps from being energized unless both a run indication and a flow indication exist.

7: The flow switch should have a set of contacts providing an indication to the PLC and to the chemical feed pump receptacles. This relay logic utilizes the physical relays to build a permissive circuit which prevents the chemical pumps from being energized unless both a run indication and a flow indication exist.

APPENDIX C
EXISTING INPUTS, OUTPUTS AND ALARMS

Deep Well & Tank Inputs, Outputs, & Alarms

	DEEP WELLS		
	Digital (RTU → Master)		
	DEEP WELL L HAND	HAND	OFF
	DEEP WELL L AUTO	AUTO	HAND
	DEEP WELL STATUS	RUN	STOP
	DEEP WELL LOW FLOW	ALARM	NORMAL
Not Used	DEEP WELL AUTH ENT	OFF	AUTH
Not Used	DEEP WELL STA DOOR	OPEN	CLOSED
Not Used	DEEP WELL OPER EMERG	ALARM	NORMAL
	Digital (Master → RTU)		
	DEEP WELL START	ON	OFF
	Analog (RTU → Master)		
	DEEP WELL FLOW	GPM	
Not Used	DEEP WELL CL2 WGT	lbs	
	DEEP WELL DRAWDOWN	FT	
	DEEP WELL CL2 RES	mg/l	
	Analog (Master → RTU)		
	VFD 2 FREQ REQ'D	Hz	
Gen at:	ALARMS		
Both	DEEP WELL COMM	FAIL	NORMAL
RTU	DEEP WELL POWER	FAIL	NORMAL
Master	DEEP WELL COND	FAIL	NORMAL
	TANKS		
	Digital (RTU → Master)		
Not Used	STORAGE TANK AUTH ENTRY	OFF	AUTH
Not Used	STORAGE TANK STA DOOR	OPEN	CLOSED
	Analog (RTU → Master)		
	STORAGE TANK LVL	FT	
Not Used	STORAGE TANK PRESS	PSI	
Gen at:	ALARMS		
Both	STORAGE TANK COMM	FAIL	NORMAL
RTU	STORAGE TANK POWER	FAIL	NORMAL