

Frankfort Plant Board

BID INVITATION #1754

ISSUED ON

May 17, 2022

BY

THE ELECTRIC & WATER PLANT BOARD OF THE CITY OF FRANKFORT, KENTUCKY

FOR

Capital Plaza Substation Construction

TO BE OPENED ON

June 7, 2022 at 2:00PM

CONSTRUCTION CONTRACT NO. 1125-03-C1

FOUNDATION REMOVAL AND INSTALLATION FOR CAPITAL PLAZA SUBSTATION

Prepared and issued by: Frankfort Plant Board Frankfort, KY (Owner) In conjunction with:
Power Centric Solutions, LLC
Gallatin, TN
(Engineer)

SEALS PAGE

The engineering material and data contained in these Contract Documents were prepared under the supervision and direction of the undersigned, whose seal(s) as a registered professional engineer(s) is (are) affixed below.

Prepared By:

Power Centric Solutions, LLC

Adam Stevenson

Principal & Vice President

05-17-22

Date Issued

Quality Assurance Review

Kenneth R Aldridge

Kenneth Aldridge, P.E. Principal & Vice President





Table of Contents

SEALS PAGE	3
DRAWING LIST – CAPITAL PLAZA SUBSTATION	7
INVITATION TO BID	9
INSTRUCTIONS TO BIDDERS	12
BID FORM FOR PROCUREMENT CONTRACT	26
BID BOND (PENAL SUM FORM)	32
PROPOSED PRODUCTS AND SUPPLIERS FORM	36
PROPOSED SUBCONTRACTORS FORM	38
PROPOSED SCHEDULE OF VALUES FORM	40
PROPOSED EXCEPTIONS OR DEVIATIONS	42
DATA AND INFORMATION FORMING PART OF BID	44
BIDDER'S QUALIFICATIONS	46
BID SUBMITTAL CHECKLIST	52
NOTICE OF AWARD	54
AGREEMENT BETWEEN OWNER AND SELLER FOR CONSTRUCTION CONTRAC	T56
NOTICE TO PROCEED	64
PERFORMANCE BOND	66
PAYMENT BOND	70
SHOP DRAWING TRANSMITTAL FORM	74
CONTRACTOR'S APPLICATION FOR PAYMENT	76
FIELD ORDER FORM	80
WORK CHANGE DIRECTIVE FORM	82
CHANGE ORDER FORM	84
CERTIFICATE OF SUBSTANTIAL COMPLETION	86
STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT	88
SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT	167
SUMMARY OF WORK	182
PRICE AND PAYMENT PROCEDURES	184
PROJECT MANAGEMENT AND COORDINATION	186
ATTACHMENT #A	190
INDEPENDENT MATERIALS TESTING SERVICES	190



SUBMITTAL PROCEDURES	195
QUALITY REQUIREMENTS	202
CLOSEOUT PROCEDURES	204
TEMPORARY FACILITIES	206
CAST-IN-PLACE CONCRETE	211
JOINT PROTECTION	220
DRILLED CONCRETE PIERS AND SHAFTS	221
CRUSHED STONE SURFACING	223

DRAWING LIST – CAPITAL PLAZA SUBSTATION

DRAWING NUMBER	DRAWING TITLE
1125-03-400	FOUNDATION PLAN (ADDITION)
1125-03-400R	FOUNDATION PLAN (REMOVAL)
1125-03-403	TRANSFORMER T56 FOUNDATION AND OIL CONTAINMENT
	DETAILS
1125-03-404	TRANSFORMER T54 FOUNDATION AND OIL CONTAINMENT
	DETAILS
GK-6134-FD1	FOUNDATION DETAILS
GK-6134-FD2	FOUNDATION DETAILS
GK-6134-FD3	FOUNDATION DETAILS
GK-6134-FD4	FOUNDATION DETAILS
GK-6134-AB1	ANCHOR BOLT LAYOUT
GK-6134-AB2	ANCHOR BOLT DETAILS



INVITATION TO BID

Frankfort Plant Board (Owner) invites Bidders to submit bids for the foundation removal and installation construction of Capital Plaza Substation.

The Work shall be substantially complete by March 15, 2023 and completed and ready for final payment by March 30, 2023. In addition, the following intermediate project milestones must be met as well:

Transformer Foundation T54 Complete	August 10, 2022
Remaining Phase-1 Foundations Complete	September 14, 2022
Phase-2 Foundations Complete	March 15, 2023

A mandatory pre-bid conference will be held on May 24, 2022 at 2:00 PM at Capital Plaza Substation, 740 Wilkinson Blvd. Frankfort, KY 40601. Bids will not be accepted from bidders that do not attend the mandatory pre-bid conference.

Bidders shall submit one original and one duplicate of Bid per the Instructions to Bidders.

Bid security in the amount of 5 percent of the Bid must accompany the Bid in accordance with the Instructions to Bidders

Owner will receive sealed bids until 2:00 pm local time on June 7, 2022 at the office of the Owner:

Frankfort Plant Board 305 Hickory Drive Frankfort, KY 40601

Attention: Jennifer Hellard

Bids will then be opened publicly and read aloud. Bids received after the time of announced opening will not be accepted.

A set of electronic (digital) Bid Documents may be obtained at no charge from the Engineer's office by emailing Adam Stevenson <u>astevenson@pwrcentric.com</u>.

Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, non-responsive, unbalanced or conditional Bids; and to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established.



Owner also reserves the right to waive all informalities not involving price, time, or other material changes to technical or contractual requirements.



INSTRUCTIONS TO BIDDERS

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.

INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACT













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INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
Article 1— Defined Terms	14
Article 2— Bidding Documents	14
Article 3— Qualifications of Bidders	15
Article 4— Pre-Bid Conference	15
Article 5— Site and Other Areas; Existing Site Conditions; Examination of Site; Owner Program; Other Work at the Site	•
Article 6— Bidder's Representations and Certifications	17
Article 7— Interpretations and Addenda	17
Article 8— Bid Security	18
Article 9— Contract Times	18
Article 10— Substitute and "Or Equal" Items	18
Article 11— Subcontractors, Suppliers, and Others	19
Article 12— Preparation of Bid	19
Article 13— Basis of Bid	21
Article 14— Submittal of Bid	21
Article 15— Modification and Withdrawal of Bid	21
Article 16— Opening of Bids	22
Article 17— Bids to Remain Subject to Acceptance	22
Article 18— Evaluation of Bids and Award of Contract	22
Article 19— Bonds and Insurance	22
Article 20— Signing of Agreement	22
Article 21— Sales and Use Taxes	23

ARTICLE 1—DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
 - A. *Issuing Office*—The office from which the Bidding Documents are to be issued, and which registers plan holders.

ARTICLE 2—BIDDING DOCUMENTS

- 2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.
- 2.03 Bidder may register as a plan holder and obtain complete sets of Bidding Documents, in the number and format stated in the Advertisement or invitation to bid, from the Issuing Office. Bidders may rely that sets of Bidding Documents obtained from the Issuing Office are complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.

2.04 Electronic Documents

- A. When the Bidding Requirements indicate that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to the Bidders as Electronic Documents in the manner specified.
 - 1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) that is readable by Adobe Acrobat Reader. It is the intent of the Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and reproductions prepared from those versions are identical in every manner to the paper copies.
- B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in

Paragraph 2.04.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within 5 days of Owner's request, Bidder must submit the following information:
 - A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
 - B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
 - C. Bidder's state or other contractor license number, if applicable.
 - D. Subcontractor and Supplier qualification information.
 - E. Other required information regarding qualifications.
- 3.02 Bidder is to submit the following information with its Bid to demonstrate Bidder's qualifications to perform the Work:
 - A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
 - B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
 - C. Bidder's state or other contractor license number, if applicable.
 - D. Subcontractor and Supplier qualification information.
 - E. Other required information regarding qualifications.
- 3.03 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.04 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

ARTICLE 4—PRE-BID CONFERENCE

4.01 A mandatory pre-bid conference will be held at the time and location indicated in the Advertisement or invitation to bid. Representatives of Owner and Engineer will be present to discuss the Project. Proposals will not be accepted from Bidders who do not attend the

- conference. It is each Bidder's responsibility to sign in at the pre-bid conference to verify its participation. Bidders must sign in using the name of the organization that will be submitting a Bid. A list of qualified Bidders that attended the pre-bid conference and are eligible to submit a Bid for this Project will be issued in an Addendum.
- 4.02 Information presented at the pre-Bid conference does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the pre-Bid conference. Information presented, and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.

ARTICLE 5—SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 Site and Other Areas

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

5.02 Existing Site Conditions

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

3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

5.03 Owner's Safety Program

A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be noted in the Supplementary Conditions.

5.04 Other Work at the Site

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

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

- 1.01 Express Representations and Certifications in Bid Form, Agreement
 - A. The Bid Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications, and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.
 - B. If Bidder is awarded the Contract, Bidder (as Contractor) will make similar express representations and certifications when it executes the Agreement.

ARTICLE 2—INTERPRETATIONS AND ADDENDA

- 2.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 2.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:

A. Adam Stevenson, email: astevenson@pwrcentric.com

- 2.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than ten days prior to the date for opening of Bids may not be answered.
- 2.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the

Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 3—BID SECURITY

- 3.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions. Such Bid bond will be issued in the form included in the Bidding Documents.
- 3.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, furnished the required Contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited, in whole in the case of a penal sum bid bond, and to the extent of Owner's damages in the case of a damages-form bond. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.
- 3.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 3.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within 7 days after the Bid opening.

ARTICLE 4—CONTRACT TIMES

- 4.01 The number of days within which, or the dates by which, the Work is to be (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any) are to be achieved, are set forth in the Agreement.
- 4.02 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 5—SUBSTITUTE AND "OR EQUAL" ITEMS

5.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be

- made to and will not be considered by Engineer until after the Effective Date of the Contract.
- 5.02 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

ARTICLE 6—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 6.01 A Bidder must be prepared to retain specific Subcontractors and Suppliers for the performance of the Work if required to do so by the Bidding Documents or in the Specifications. If a prospective Bidder objects to retaining any such Subcontractor or Supplier and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 6.02 The apparent Successful Bidder, and any other Bidder so requested, must submit to Owner a list of the Subcontractors or Suppliers proposed for furnishing portions of the Work within five days after Bid opening. Include the name, address, description of the work, and percentage of the total contract.
- 6.03 If requested by Owner, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor or Supplier. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- 6.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor or Supplier, so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.07 of the General Conditions.

ARTICLE 7—PREPARATION OF BID

- 7.01 The Bid Form is included with the Bidding Documents.
 - A. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.

- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."
- 7.02 If Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder shall prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8½ inch by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.
- 7.03 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate seal must be affixed and attested by the corporate secretary or an assistant corporate secretary. The corporate address and state of incorporation must be shown.
- 7.04 A Bid by a partnership must 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 must be shown.
- 7.05 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.
- 7.06 A Bid by an individual must show the Bidder's name and official address.
- 7.07 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.
- 7.08 All names must be printed in ink below the signatures.
- 7.09 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 7.10 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.
- 7.11 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.
- 7.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids

and attach such certification to the Bid. Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 8—BASIS OF BID

- 8.01 Lump Sum
 - A. Bidders must submit a Bid on a lump sum basis as set forth in the Bid Form.
- 8.02 *Allowances*
 - A. For cash allowances the Bid price must include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.03 of the General Conditions.

ARTICLE 9—SUBMITTAL OF BID

- 9.01 The Bid Form is to be completed and submitted in duplicate, along with the Bid Security and 2 complete copies (one marked "Duplicate") of the documents outlined on the Bid Submittal Checklist.
- 9.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, the name and address of Bidder, and must be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid must be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid must be addressed to the location designated in the Advertisement.
- 9.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 10—MODIFICATION AND WITHDRAWAL OF BID

- 10.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 10.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may

withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 11—OPENING OF BIDS

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

ARTICLE 12—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

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

ARTICLE 13—EVALUATION OF BIDS AND AWARD OF CONTRACT

- 13.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.
- 13.02 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible.
- 13.03 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.

ARTICLE 14—BONDS AND INSURANCE

- 14.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds, other required bonds (if any), and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by required bonds and insurance documentation.
- 14.02 Article 8, Bid Security, of these Instructions, addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 15—SIGNING OF AGREEMENT

15.01 When Owner issues a Notice of Award to the Successful Bidder, it will be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder must execute and deliver the required number of counterparts of the Agreement and any bonds and insurance documentation required to be delivered by the Contract Documents to Owner. Within 10 days thereafter, Owner will deliver one fully executed counterpart of the EJCDC® C-200, Instructions to Bidders for Construction Contract.

Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 16—SALES AND USE TAXES

16.01 Owner is exempt from Kentucky state sales and use taxes on materials and equipment to be incorporated in the Work. Said taxes must not be included in the Bid. Refer to Paragraph SC-7.10 of the Supplementary Conditions for additional information.

BID FORM FOR PROCUREMENT CONTRACT

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

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

Frankfort Plant Board

305 Hickory Drive Frankfort, KY 40601

Attention: Jennifer Hellard

Phone: (502) 352-44322

Email: jhellard@fewpb.com

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

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Products and Suppliers;
 - D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
 - F. Required Bidder Qualification Statement with supporting data
 - G. Proposed Schedule of Values Form
 - H. Proposed Exceptions and Deviations
 - I. Bid Submittal Checklist
 - J. Evidence of ability to meet insurance and bonding requirements of the General Conditions
 - K. Data and Information Forming Part of Bid

ARTICLE 3—BASIS OF BID

- 3.01 Lump Sum Bids
 - A. Bidder will complete the Work in accordance with the Contract Documents for the following lump sum (stipulated) price(s):
 - 1. Lump Sum Price (Single Lump Sum)

Lump Sum Bid Price	\$	
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ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete on or before March 15, 2023 and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before March 30, 2023. In addition, Bidder agrees to meet the project milestone as outlined in the Summary of Work.
- 4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 5.01 Bid Acceptance Period
 - A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- 5.02 Instructions to Bidders
 - A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.
- 5.03 Receipt of Addenda
 - A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

- 6.01 The following documents are attached to and made a condition of this Bid:
 - A. Proposed Exceptions and Deviations
 - B. Required Bidder Qualification Statement with supporting data
 - C. Certifications or evidence of ability to meet bonding and insurance requirements of the General and Supplementary Conditions

- D. If necessary, identify any Attachments by Bidder that are to be made part of its Bid
- E. The Bidder shall furnish with its Proposal a bill of materials that shall be complete and include material descriptions, quantities, weights, manufacturer names, and catalog types. The bill of materials shall be submitted for the Owner's analysis of bids only and shall not become part of the bound Procurement Contract Documents.

ARTICLE 7—BIDDER'S ACKNOWLEDGMENTS

7.01 Bidder's Representations

- A. In submitting this Bid, Bidder represents the following:
 - 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 - 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - 8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

- 9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- 10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

7.02 Bidder's Certifications

A. The Bidder certifies the following:

- 1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
- 2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
- 3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
- 4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder's Contractor License No.: (if

applicable)

Bidder: (typed or printed name of organization) By: (individual's signature) Name: (typed or printed) Title: (typed or printed) Date: (typed or printed) If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign. Attest: (individual's signature) Name: (typed or printed) Title: (typed or printed) Date: (typed or printed) Address for giving notices: Bidder's Contact: Name: (typed or printed) Title: (typed or printed) Phone: Email: Address:

BID BOND (PENAL SUM FORM)

Bidder	Surety
Name:	Name:
Address (principal place of business):	Address (principal place of business):
Owner	Bid
Name:	Project (name and location):
Address (principal place of business):	
	Bid Due Date:
Bond	
Penal Sum:	
Date of Bond:	
	d hereby, subject to the terms set forth in this Bid ally executed by an authorized officer, agent, or
Bidder	Surety
(Full formal name of Bidder)	(Full formal name of Surety) (corporate seal)
By:	By:
(Signature)	(Signature) (Attach Power of Attorney)
Name:	Name:
(Printed or typed)	(Printed or typed)
Title:	Title:
Attest	Attest:
(Signature)	(Signature)
Name:	Name:
(Printed or typed)	(Printed or typed)
Title:	Title:
Notes: (1) Note: Addresses are to be used for giving any requir joint venturers, if necessary.	ed notice. (2) Provide execution by any additional parties, such as

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

be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

PROPOSED PRODUCTS AND SUPPLIERS FORM

The following Suppliers are proposed to furnish the following products and material and equipment to be incorporated into the Work. Attach additional sheets as necessary.

Name	Address	Product, Material, Equipment



PROPOSED SUBCONTRACTORS FORM

The following Subcontractor, other persons and organizations are proposed to be employed to furnish portions of the Work. Attach additional sheets as necessary.

Name	Address	Type of Construction	% of Total Contract



PROPOSED SCHEDULE OF VALUES FORM

Description	Amount
Mobilization	
Schedules	
Bonds and Insurance	
Remove & dispose of existing foundations	
Install new foundations	
Cleanup, Contract Closeout and Record Drawings	

Confirm Total Equals Amount of Total Bid \$



PROPOSED EXCEPTIONS OR DEVIATIONS

PROPOSED EXCEPTIONS AND DEVIATIONS MAY ONLY BE SUBMITTED ON THIS FORM AND MAY BE ACCEPTED OR REJECTED UNILATERALLY BY OWNER, IN ITS SOLE DISCRETION.

Each exception and deviation proposed (excluding Priced Options specified in the Bid Form) must be summarized and additively or deductively priced below with specific details attached in accordance with the instructions below. The summary must include a reference to the Section(s) of the Bidding Documents affected by the proposed exception. Bids that do not comply with these requirements for the presentation of exceptions may be considered nonresponsive and may be rejected at the discretion of the Owner.

SUMMARY

Description	Price Adjustment Amount (Indicate deductions in parentheses)

Presentation of Specific Details of Exceptions and Deviations

- 1. Describe specific details of exceptions and deviations by referencing the applicable page number, article number, and article title from the Bidding Documents. Include this information directly in "Description" column of table above and/or include a separate attachment referencing it in the Description" column.
- 2. Present proposed deletions by setting off in brackets, thus: [delete this language], and present proposed substitute or new language by underlining, thus: <u>substitute this language</u>.
- 3. Exceptions which are general, which make reference to Contractor's standard terms and conditions, or which make reference to Contractor's descriptive information as a whole are not acceptable.
- 4. Each exception or deviation is to be separately priced. Zero may be used.



DATA AND INFORMATION FORMING PART OF BID

Deviations and exceptions included in these items will not be considered and may be cause for rejection. Include proposed exceptions and deviations in the Proposed Exceptions and Deviations Form.

A. SCHEDULES

Provide a proposed schedule for the Project Schedule based on a Notice to Proceed on approximately June 22, 2022 and a Substantial Completion Date of March 15, 2023. Indicate the schedule for submittals and when Owner-furnished equipment must be delivered to the Site and when field service engineers for this equipment must be furnished. The schedule shall include milestones related to procurement, construction, equipment checkout and functional testing in sufficient detail for the Owner to evaluate the Bidder's ability to perform the Work within the Contract Time.

B. CONSUMABLES, SPARE PARTS AND SPECIAL TOOLS

-NONE-

C. WORKPLAN

Provide a narrative workplan describing the Bidder's approach to the successful execution of the Work to accommodate the Proposed Project Schedule; allow for review of submittals, coordination, and development of detailed construction sequencing.

D. PROJECT MANAGEMENT INFORMATION

- 1. Describe how schedule progress will be measured and tracked.
- 2. Describe how the Schedule of Values and cash flow will be determined and how progress for payment will be determined.
- 3. Provide a description of how documents will be controlled to assure that the appropriate revision used in design, procurement, and construction.



A.

В.

BIDDER'S QUALIFICATIONS

THE FOLLOWING DATA, STATEMENTS OF EXPERIENCE, PERSONNEL, EQUIPMENT, AND GENERAL QUALIFICATIONS OF THE BIDDER ARE SUBMITTED AS PART OF THE BID AND BIDDER REPRESENTS AND GUARANTEES THE TRUTHFULNESS AND ACCURACY THEREOF AND ITS ABILITY TO MEET THE QUALIFICATION REQUIREMENTS.

Bidder's organization has had experience in construction comparable to that required by

Bidder's organization has been in business continuously from the year

the Bidding	-	ractor for years and	l as a subcontrac
proposed for		dder's organization, Subcontra ed, which are similar in charact	
Year	Owner	Location	Contract Amount

1. The following is a list of concrete filled steel pile installations Bidder, Subcontractor(s) or Supplier(s) proposed for this Contract, have completed in the State of Kentucky which are similar in character and in magnitude to that required by the Bidding Documents.

Owner	Location	Contract Amount
	Owner	Owner Location

2. The following rigger is proposed to be employed for offloading of Not Applicable. Attach qualifications and references.

Name	Address

D. The following list of supervisory personnel are currently employed by the Bidder and available for assignment for assignment to the Project (project manager, superintendents, principal foremen and engineers).

Name	Title	Years of Experience

Attach detailed resumes of qualifications, previous employers and experience for each.



E. The following is a list of equipment owned by Bidder's organization which is available for use on the Project.

Type of Equipment	Size or Capacity	Present Location

F. The names and addresses of the members of the Board of Directors of corporation, or the names and addresses of all persons and parties interested in this Bid as partners of a partnership or as individuals, are as follows.

Name	Residence Address	Business Address and Phone Number

G. The following is a list of all projects Bidder has undertaken in the last five years which have resulted in partial or final settlement of the contract by arbitration or litigation.

Name of Client & Project	Contact Name/Phone Number	Original Contract Amount	Total Claims	Mediated, Arbitrated or Litigated Amount of Settlement of

H. Reference is hereby made to the following bank or banks as to the financial responsibility of the Bidder.

Name of Bank	Address	Contact Name and Phone Number



I. Bidder and Subcontractor(s) current license.

Name	State	Туре	License Number

J. The following is a list of safety citations issued to the Bidder over the last 3 years.

Name of Client and Project	Contact Name and Phone Number	Type of Citation	Issued by



BID SUBMITTAL CHECKLIST

BIDDER CONFIRMS THAT THE FOLLOWING DOCUMENTS ARE FULLY COMPLETED, INCLUDED IN AND MADE A PART OF ITS BID.

	□Bid Form
	☐Bid Bond Penal Sum Form
	□ Proposed Products and Suppliers Form
	□ Proposed Subcontractors Form
	□ Proposed Schedule of Values
	□ Proposed Exceptions and Deviations
	□Data and Information Forming Part of Bid
	☐Bidders Qualifications
	□Evidence of ability to meet insurance and bonding requirements of the General Conditions
	☐ Identify any Attachments below submitted by Bidder that are to be made part of its Bid. (list items below or indicate "None")
	☐ The hardcopy, signed original and 2 complete copies (marked "Duplicate") of the above have been submitted to the Owner
Confirm	med by Bidder:
Date:_	



NOTICE OF AWARD

NOTICE OF AWARD

Date of Issuance:	
Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Project:	
Contract Name:	
Bidder:	
Bidder's Address:	

You are notified that Owner has accepted your Bid dated DATE for the above Contract, and that you are the Successful Bidder and are awarded a Contract for: Capital Plaza Substation The Contract Price of the awarded Contract is \$[Contract Price]. Contract Price is subject to adjustment based on the provisions of the Contract, including but not limited to those governing changes, Unit Price Work, and Work performed on a cost-plus-fee basis, as applicable.

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

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

- 1. Deliver to Owner [number of copies sent] counterparts of the Agreement, signed by Bidder (as Contractor).
- 2. Deliver with the signed Agreement(s) the Contract security (such as required performance and payment bonds) and insurance documentation, as specified in the Instructions to Bidders and in the General Conditions, Articles 2 and 6.

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited. Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner:	Frankfort Plant Board	
By (signature):		
Name (printed):		
Title:		
Copy: Engineer		

AGREEMENT BETWEEN OWNER AND SELLER FOR CONSTRUCTION CONTRACT

This Agreement is by and between **Frankfort Plant Board** ("Owner") and ("Contractor").

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

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described in the Summary of Work.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described in the Summary of Work.

ARTICLE 3—ENGINEER

- 3.01 The Owner has retained **Power Centric Solutions, LLC** ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.
- 3.02 The part of the Project that pertains to the Work has been designed by **Engineer.**

ARTICLE 4—CONTRACT TIMES

- 4.01 *Time is of the Essence*
 - A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 *Contract Times:*
 - A. The Work will be substantially complete on or before March 15, 2023, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before March 30, 2023. In addition, Bidder agrees to meet the project milestone as outlined in the Summary of Work.
- 4.03 *Liquidated Damages*
 - A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time.

- Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
- 1. Contractor shall pay Owner \$300 for each day that expires after the time specified in paragraph 4.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$300 for each day that expires after the time specified in paragraph 4.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5—CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:
 - A. For all Work other than Unit Price Work, a lump sum of \$[number].
 - All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.
 - B. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

- 6.01 Submittal and Processing of Payments
 - A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 Progress Payments; Retainage
 - A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
 - Prior to 50% Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
 - a. 90 percent of the value of the Work completed (with the balance being retainage) (i.e., 10% of the undisputed amount due is retainage).

- 1) If 50 percent or more of the Work has been completed, as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
- b. 90 percent of cost of materials and equipment not incorporated in the Work (with the balance of 10% being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

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

6.04 *Consent of Surety*

A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 Interest

A. All amounts not paid when due will bear interest at the rate of 6 percent per annum.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 Contents

- 1. This Agreement.
- 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
- General Conditions.
- 4. Supplementary Conditions.
- 5. Specifications as listed in the table of contents of the project manual
- 6. Drawings listed on the attached sheet index.
- 7. Addenda (numbers [number] to [number], inclusive).
- 8. Exhibits to this Agreement (enumerated as follows):
 - a. Contractors Bid
 - b. Documentation submitted by Contractor prior to Notice of Award

- 9. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
- 10. Evidence or Certificate of Insurance
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATION, CERTIFICATIONS, AND STIPULATIONS

8.01 *Contractor's Representations*

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - 1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 - 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

- 7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- 8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- 9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- 10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution:
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
- B. Contractor agrees in hiring of employees for performance of the Work that provision for equal employment opportunity, anti-discrimination, and affirmative action will be made in accordance with all required Federal, state and local Laws and Regulations.
- C. Contractor agrees to comply with all relevant provisions of the Kentucky State Labor Law, relating to the performance of the Work under contract.

8.03 Standard General Conditions

A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

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

The Agreement will be effective on [indicate date on which Contract becomes effective] (which is the Effective Date of the Contract.

Owner:	Seller
(typed or printed name of organization)	(typed or printed name of organization)
By:	By:
(individual's signature)	(individual's signature)
Date:	Date:
(date signed)	(date signed)
Name:	Name:
(typed or printed)	(typed or printed)
Title:	Title:
(typed or printed)	(typed or printed)
	(If [Type of Entity] is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
(individual's signature)	(individual's signature)
Title:	Title:
(typed or printed)	(typed or printed)
Address for giving notices:	Address for giving notices:
Designated Representative:	Designated Representative:
Name:	Name:
(typed or printed)	(typed or printed)
Title:	Title:
(typed or printed)	(typed or printed)
Address:	Address:
Phone:	Phone:
Email:	 Email:

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

NOTICE TO PROCEED

Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
Effective Date of Contract:	
•	t the Contract Times under the above Contract will nes are to start] pursuant to Paragraph 4.01 of the General
On that date, Contractor shall start perfo Work will be done at the Site prior to such	rming its obligations under the Contract Documents. No ch date.
In accordance with the Agreement:	
•	oletion must be achieved is March 15, 2023, and the date must be achieved is March 30, 2023. In addition, Bidder as outlined in the Summary of Work.
Before starting any Work at the Site, Con	ntractor must comply with the following:
identified additional insureds and los	iver to the other (with copies to Engineer and other s payees) certificates of insurance which each is accordance with the Contract Documents.
Owner:	
By (signature):Name (printed):	
Title:	
Date Issued:	
Copy: Engineer	

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PERFORMANCE BOND

Contractor	Surety		
Name: [Full formal name of Contractor]	Name: [Full formal name of Surety]		
Address (principal place of business):	Address (principal place of business):		
[Address of Contractor's principal place of business]	[Address of Surety's principal place of business]		
Owner	Contract		
Name: [Full formal name of Owner]	Description (name and location):		
Mailing address (principal place of business):	[Owner's project/contract name, and location		
[Address of Owner's principal place of	of the project]		
business]	Contract Price: [Amount from Contract]		
	Effective Date of [Date from		
Bond			
Bond [Amount]			
Date of Bond: [Date]			
(Date of Bond cannot be earlier than Effective Date of Contract) Modifications to this Bond form: □ None □ See Paragraph 16			
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.			
Contractor as Principal	Surety		
(Full formal name of Contractor)	(Full formal name of Surety) (corporate seal)		
By:	Ву:		
(Signature)	(Signature)(Attach Power of Attorney)		
Name: (Printed or typed)	Name: (Printed or typed)		
Title:	Title:		
Attest:	Attest:		
(Signature)	(Signature)		
Name: (Printed or typed)	Name: (Printed or typed)		
Title:	Title:		
Notes: (1) Provide supplemental execution by any additional Contractor, Surety, Owner, or other party is considered plural	l parties, such as joint venturers. (2) Any singular reference to where applicable.		

- 1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
- 2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
- 3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
- 4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
- 5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

- 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
 - 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- 6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
- 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
- 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
- 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this

- paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
- 12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. Balance of the Contract Price—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
- 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
- 14.4. Owner Default—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
- 15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
- 16. Modifications to this Bond are as follows: None

PAYMENT BOND

Contractor	Surety	
Name: [Full formal name of Contractor]	Name: [Full formal name of Surety]	
Address (principal place of business):	Address (principal place of business):	
[Address of Contractor's principal place of business]	[Address of Surety's principal place of business]	
Owner	Contract	
Name: [Full formal name of Owner] Mailing address (principal place of business): [Address of Owner's principal place of business]	Description (name and location): [Owner's project/contract name, and location of the project]	
business	Contract Price: [Amount, from Contract]	
	Effective Date of [Date, from	
Bond		
Bond [Amount]		
Date of Bond: [Date] (Date of Bond cannot be earlier than Effective Date of Contract) Modifications to this Bond form:		
, ,	bound hereby, subject to the terms set forth in this ond to be duly executed by an authorized officer,	
Contractor as Principal	Surety	
(Full formal name of Contractor)	(Full formal name of Surety) (corporate seal)	
By:	By:	
(Signature)	(Signature)(Attach Power of Attorney) Name:	
Name: (Printed or typed)	(Printed or typed)	
Title:	Title:	
Attest: (Signature)	Attest: (Signature)	
Name:	Name:	
(Printed or typed)	(Printed or typed)	
Title:	Title:	
Notes: (1) Provide supplemental execution by any additional Contractor, Surety, Owner, or other party is considered plurate	al parties, such as joint venturers. (2) Any singular reference to where applicable.	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment

- furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
- 2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- 3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
- 4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
- 5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
- 6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
- 7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable

- attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
- 8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
- 9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
- 11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
- 13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
- 14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
- 15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

- 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;

- 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
- 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
- 16.1.4. A brief description of the labor, materials, or equipment furnished;
- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim:
- 16.1.7. The total amount of previous payments received by the Claimant; and
- 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. Claimant—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. Owner Default—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
- 17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
- 18. Modifications to this Bond are as follows: **None**

			SHC)P]	DRAWING TRA	NSN	(IITTA)	L FORM				
PROJE	CT TITLE:					PCS V	V/O NO			CONTRAC	CT NO	
PROJECT LOCATION:					CONT	RACT TITLE	:					
SELLER'S TRANSMITTAL									ENGINEE	R'S ACTION		
CHECK ONE:							LEGEND: A - Approved RF - Reference					
This is: an original submittal			T	RANSMITTAL NO		MC - M	1ake	NA -	Submittal			
	a first resubmittal					C	Corrections		No Action Taken			
	aresubmitt	al		S	PEC. SECTION NO		AR - Amend-Resubmit					
NO.	MANUFACTURER		DWG.	REV.	SUBJECT					DISTRIBUTION	Shop Dwg.	T
COPIES			NO.	NO.			Action Taken	Cont.	Res. Engr.	Owner	File	Extra
Complete (a)	e either (a) or (b) following: We have reviewed the material or ed in this submittal and certify that it is d with the Contract Documents (no exit of the contract Documents). We have reviewed the material or ed in this submittal and certify that it is d with the Contract Documents except	correct a ception quipmen correct a	and in strict co s). nt contained and in strict co	nforma		ne						
	(list deviations):											
For addit	ional remarks see Serial Letter No						For additiona	al remarks see Seri	al Letter No.	·		
	TOR'S NAME											
By			DATE				By			Date		

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CONTRACTOR'S APPLICATION FOR PAYMENT

Owner:	Owner's Project No	.:				
Engineer:	Engineer's Project N	No.:				
Contractor:	: No.:					
Project:						
Contract:		_				
	tion Date:					
Application Period: From	to					
1. Original Contract Price		\$ -				
2. Net change by Change Orders		\$ -				
3. Current Contract Price (Line 1 + Line 2)		\$ -				
4. Total Work completed and materials sto	red to date					
(Sum of Column G Lump Sum Total and C	Column J Unit Price Total)	\$ -				
5. Retainage						
a X	Completed	\$ -				
· · · · · · · · · · · · · · · · · · ·	l Materials	\$ -				
c. Total Retainage (Line 5.a + Line 5.b)		\$ -				
6. Amount eligible to date (Line 4 - Line 5.0		\$ -				
7. Less previous payments (Line 6 from pri	or application)	A				
8. Amount due this application	2 line 4\	\$ -				
Balance to finish, including retainage (Li Contractor's Certification	ne 3 - Line 4)	\$ -				
The undersigned Contractor certifies, to the best of its knowledge, the following: (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment; (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.						
Contractor:						
Signature:	Da	te:				
Recommended by Engineer	Approved by Owner					
Ву:	Ву:					
Title:	Title:					
Date:	Date:	_				
Approved by Funding Agency						
Ву:	Ву:					
Title:	Title:					
Date:	Date:					

Progress Estin	nate - Lump Sum Work					Contrac	tor's Application	n for Payment
Owner: Engineer: Contractor: Project: Contract:					-	Owner's Project No Engineer's Project Contractor's Project		
Application No.:	Application Period:	From		to			Application Date:	
A	В	С	D	E	F	G	Н	I I
Item No.	Description	Scheduled Value (\$)	Work Co (D + E) From Previous Application (\$)		Materials Currently Stored (not in D or E) (\$)	Work Completed and Materials Stored to Date (D+E+F) (\$)	% of Scheduled Value (G / C) (%)	Balance to Finish (C - G) (\$)
	·		Original Contract	• •				• ,
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	Original Contract Totals	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -

Progres	s Estimate - Unit Price Work								Contractor's A	pplicati	on for Payment
Owner: Engineer: Contractor Project: Contract:	:							-	Owner's Project No Engineer's Project Contractor's Projec	No.:	
Applicatio	n No.: Application Period:	From		to		=			Applica	tion Date:	
Α	В	С	D	E	F	G	Н	I	J	K	L
Bid Item No.	Description	Item Quantity	Contract Units	Unit Price	(\$)	Estimated	ompleted Value of Work Completed to Date (E X G) (\$)	Materials Currently Stored (not in G) (\$)	Work Completed and Materials Stored to Date (H+I) (\$)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) (\$)
		1 1		Origin	nal Contract	1		1			
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			Origina	l Contract Totals			\$ -	\$ -	\$ -		\$ -

Stored Mater	ials Summa	ry								Contrac	tor's Applicatio	n for Payment			
Owner: Engineer: Contractor:									Owner's Project No.: Engineer's Project No.: Contractor's Project No.:						
Project: Contract:									• •	Contractor 3 Froje	ct No				
Application No.:		_		Application Period:	From		to		-		Application Date:				
Α	В	С	D	E	F	G	Н	I	J	K	L	М			
Item No. (Lump Sum Tab) or Bid Item No. (Unit Price Tab)	Supplier Invoice No.	Submittal No. (with Specification Section No.)	Description of Materials or Equipment Stored	Storage Location	Application No. When Materials Placed in Storage	Previous Amount Stored (\$)	Amount Stored this Period (\$)	Amount Stored to Date (G+H) (\$)	Amount Previously	ncorporated in Wor Amount Incorporated in the Work this Period (\$)	rk Total Amount Incorporated in the Work (J+K) (\$)	Materials Remaining in Storage (I-L) (\$)			
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					Totals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			

FIELD ORDER FORM

FIELD ORDER NO.: ____

er's Project No.: ctor's Project No.: Order: ribed in this Field Order, issued for minor changes in the Work ctor considers that a change in
Order: ribed in this Field Order, issued for minor changes in the Work ctor considers that a change in
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WORK CHANGE DIRECTIVE FORM WORK CHANGE DIRECTIVE NO.: ___

Owner:		Owner's Project No.:
Engineer:		Engineer's Project No.:
Contractor:		Contractor's Project No.:
Project:		
Contract Name:		
Date Issued:		Effective Date of Work Change Directive:
Description:	of the change to the V	ly with the following change(s): Vork
Attachments: [List docume	ents related to the cha	nge to the Work]
1	Work Change Directive: e purpose for the chan	
	eeed promptly with the d Contract Time, is issu	Work described herein, prior to agreeing to change in ued due to:
Notes to User—Ch	eck one or both of the fo	llowing
☐ Non-agreement reasons.	nt on pricing of propose	ed change. Necessity to proceed for schedule or other
Estimated Chang	e in Contract Price and	Contract Times (non-binding, preliminary):
Contract Price:	\$	[increase] [decrease] [not yet estimated].
Contract Time:	days	[increase] [decrease] [not yet estimated].
	d change in Contract Pr Unit Price □ Cost of the	
Recommo	ended by Engineer	Authorized by Owner
Ву:		
Title:		
Date:		

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CHANGE ORDER FORM

CHANGE ORDER NO.: ___

Owner:		Owner's Project No.:				
Engineer:		Engineer's Project No.:				
Contractor:		Contractor's Project No.:				
Project:						
Contract Name:						
	Ef	fective Date of Change				
Date Issued:		der:				
The Contract is mo	odified as follows upon exec	ution of this Change Order:				
Description:	•	C				
[Description o	f the change]					
Attachments:	G 2					
[List documen	ts related to the change]					
-	<u> </u>	Change in Contract Times				
		[State Contract Times as either a specific date or a				
	ge in Contract Price	number of days]				
Original Contract Pri	ce:	Original Contract Times: Substantial Completion:				
\$		Ready for final payment:				
<u> </u>	e] from previously approved Chan					
	o. [Number of previous Chan					
Order]:	(F	Change Order]:				
		Substantial Completion:				
\$		Ready for final payment:				
Contract Price prior t	o this Change Order:	Contract Times prior to this Change Order:				
¢.		Substantial Completion:				
\$		Ready for final payment:				
[Increase] [Decrease	e] this Change Order:	[Increase] [Decrease] this Change Order: Substantial Completion:				
\$		Ready for final payment:				
	orating this Change Order:	Contract Times with all approved Change Orders:				
Contract Trice incorp	orating this Change Order.	Substantial Completion:				
\$		Ready for final payment:				
Dagam	amonded by Engineer (if					
Recon	nmended by Engineer (if	Authorized by Overen				
D	required)	Authorized by Owner				
By:		_				
Title:						
Date:	11 0					
Authorize	d by Owner	Approved by Funding Agency (if applicable)				
By:						
Title:						
Date:						

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CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
This Preliminary	☐ Final Certificate of Substantial Completion applies to:
•	The following specified portions of the Work:
-	ortion of the work for which Certificate of Substantial Completion is
issued]	
	Completion: [Enter date, as determined by Engineer]
	this Certificate applies has been inspected by authorized representatives of and Engineer, and found to be substantially complete. The Date of Substantial
	York or portion thereof designated above is hereby established, subject to the
•	Contract pertaining to Substantial Completion. The date of Substantial
	inal Certificate of Substantial Completion marks the commencement of the
1	n period and applicable warranties required by the Contract.
A punch list of items	s to be completed or corrected is attached to this Certificate. This list may not
be all-inclusive, and	the failure to include any items on such list does not alter the responsibility
of the Contractor to	complete all Work in accordance with the Contract Documents.
	tractual responsibilities recorded in this Certificate should be the product of
mutual agreement of	Owner and Contractor; see Paragraph 15.03.D of the General Conditions.
The responsibilities	between Owner and Contractor for security, operation, safety, maintenance,
_	nce, and warranties upon Owner's use or occupancy of the Work must be as
	ract, except as amended as follows:
-	ner's Responsibilities: None As follows:
	nts to Owner's Responsibilities]
Amendments to Con	tractor's Responsibilities: None As follows:
[List amendmen	nts to Contractor's Responsibilities]
	nents are attached to and made a part of this Certificate:
[List attachmen	ts such as punch list; other documents]
	s not constitute an acceptance of Work not in accordance with the Contract
	a release of Contractor's obligation to complete the Work in accordance with
the Contract Docume	ents.
Engineer	
By (signature):	
Name (printed):	
Title:	

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

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By









Endorsed By





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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

		Page
Article 1-	—Definitions and Terminology	94
<u>1.01</u>	<u>Defined Terms</u>	94
1.02	<u>Terminology</u>	99
Article 2-	Preliminary Matters	100
2.01	Delivery of Performance and Payment Bonds; Evidence of Insurance	100
2.02	Copies of Documents	100
2.03	Before Starting Construction	100
2.04	Preconstruction Conference; Designation of Authorized Representatives	101
2.05	Acceptance of Schedules	101
2.06	Electronic Transmittals	101
Article 3-	—Contract Documents: Intent, Requirements, Reuse	102
<u>3.01</u>	<u>Intent</u>	102
3.02	Reference Standards	102
3.03	Reporting and Resolving Discrepancies	103
3.04	Requirements of the Contract Documents	103
3.05	Reuse of Documents	104
Article 4-	—Commencement and Progress of the Work	104
<u>4.01</u>	Commencement of Contract Times; Notice to Proceed	104
4.02	Starting the Work	105
4.03	Reference Points	105
<u>4.04</u>	Progress Schedule	105
<u>4.05</u>	<u>Delays in Contractor's Progress</u>	105
Article 5-	—Site; Subsurface and Physical Conditions; Hazardous Environmental Conditions	106
<u>5.01</u>	Availability of Lands	106
<u>5.02</u>	Use of Site and Other Areas	107
<u>5.03</u>	Subsurface and Physical Conditions	108
<u>5.04</u>	<u>Differing Subsurface or Physical Conditions</u>	109
<u>5.05</u>	Underground Facilities	110
<u>5.06</u>	Hazardous Environmental Conditions at Site	112

Article 6-	<u>Bonds and Insurance</u>	114
<u>6.01</u>	Performance, Payment, and Other Bonds	115
<u>6.02</u>	Insurance—General Provisions	115
6.03	Contractor's Insurance	117
6.04	Builder's Risk and Other Property Insurance	118
<u>6.05</u>	Property Losses; Subrogation	119
<u>6.06</u>	Receipt and Application of Property Insurance Proceeds	120
Article 7-	—Contractor's Responsibilities	120
<u>7.01</u>	Contractor's Means and Methods of Construction	120
<u>7.02</u>	Supervision and Superintendence	120
<u>7.03</u>	Labor; Working Hours	121
<u>7.04</u>	Services, Materials, and Equipment	121
<u>7.05</u>	"Or Equals"	121
<u>7.06</u>	<u>Substitutes</u>	122
<u>7.07</u>	Concerning Subcontractors and Suppliers	124
<u>7.08</u>	Patent Fees and Royalties	125
<u>7.09</u>	<u>Permits</u>	126
<u>7.10</u>	<u>Taxes</u>	126
<u>7.11</u>	Laws and Regulations	126
<u>7.12</u>	Record Documents	127
<u>7.13</u>	Safety and Protection	127
<u>7.14</u>	Hazard Communication Programs	128
<u>7.15</u>	<u>Emergencies</u>	128
<u>7.16</u>	<u>Submittals</u>	128
<u>7.17</u>	Contractor's General Warranty and Guarantee	131
<u>7.18</u>	<u>Indemnification</u>	132
<u>7.19</u>	Delegation of Professional Design Services	133
Article 8-	Other Work at the Site	133
<u>8.01</u>	Other Work	133
<u>8.02</u>	Coordination	134
<u>8.03</u>	<u>Legal Relationships</u>	135
Article 9-	Owner's Responsibilities	136
9.01	Communications to Contractor	136

9.02	Replacement of Engineer	136
9.03	Furnish Data	136
9.04	Pay When Due	136
9.05	Lands and Easements; Reports, Tests, and Drawings	136
9.06	<u>Insurance</u>	136
9.07	Change Orders	136
9.08	Inspections, Tests, and Approvals	136
9.09	<u>Limitations on Owner's Responsibilities</u>	136
9.10	Undisclosed Hazardous Environmental Condition	137
<u>9.11</u>	Evidence of Financial Arrangements	137
<u>9.12</u>	Safety Programs	137
Article 10	0—Engineer's Status During Construction	137
<u>10.01</u>	Owner's Representative	137
10.02	<u>Visits to Site</u>	137
10.03	Resident Project Representative	137
10.04	Engineer's Authority	138
10.05	Determinations for Unit Price Work	138
10.06	Decisions on Requirements of Contract Documents and Acceptability of Work	138
10.07	Limitations on Engineer's Authority and Responsibilities	138
10.08	Compliance with Safety Program	139
Article 1	1—Changes to the Contract	139
11.01	Amending and Supplementing the Contract	139
11.02	Change Orders	139
11.03	Work Change Directives.	140
11.04	Field Orders	140
11.05	Owner-Authorized Changes in the Work	140
11.06	Unauthorized Changes in the Work	141
11.07	Change of Contract Price	141
11.08	Change of Contract Times	142
11.09	Change Proposals	142
11.10	Notification to Surety	143
	2 <u>—Claims</u>	143
12.01	 <u>Claims</u>	143

Article 13-	—Cost of the Work; Allowances; Unit Price Work	145
<u>13.01</u>	Cost of the Work	145
13.02	<u>Allowances</u>	148
<u>13.03</u>	Unit Price Work	149
Article 14-	Tests and Inspections; Correction, Removal, or Acceptance of Defective Work	149
<u>14.01</u>	Access to Work	149
14.02	Tests, Inspections, and Approvals.	150
14.03	Defective Work	150
<u>14.04</u>	Acceptance of Defective Work	151
<u>14.05</u>	Uncovering Work	151
<u>14.06</u>	Owner May Stop the Work	152
<u>14.07</u>	Owner May Correct Defective Work	152
Article 15	-Payments to Contractor; Set-Offs; Completion; Correction Period	152
<u>15.01</u>	Progress Payments	152
<u>15.02</u>	Contractor's Warranty of Title	156
<u>15.03</u>	Substantial Completion.	156
<u>15.04</u>	Partial Use or Occupancy	157
<u>15.05</u>	Final Inspection	157
<u>15.06</u>	Final Payment	157
<u>15.07</u>	Waiver of Claims	159
<u>15.08</u>	Correction Period	159
Article 16-	—Suspension of Work and Termination	160
<u>16.01</u>	Owner May Suspend Work	160
<u>16.02</u>	Owner May Terminate for Cause	160
<u>16.03</u>	Owner May Terminate for Convenience	161
<u>16.04</u>	Contractor May Stop Work or Terminate	162
Article 17	Final Resolution of Disputes	162
<u>17.01</u>	Methods and Procedures	162
Article 18-	- Miscellaneous	163
<u>18.01</u>	Giving Notice	163
18.02	Computation of Times	163
18.03	Cumulative Remedies	163
18.04	<u>Limitation of Damages</u>	163

<u>18.05</u>	No Waiver	163
<u>18.06</u>	Survival of Obligations	163
<u>18.07</u>	Controlling Law	163
18.08	Assignment of Contract	164
18.09	Successors and Assigns	164
18.10	Headings	164

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

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

10. Claim

a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the

in conjunction with Owner's legal counsel and insurance advisors.

- Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
- c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
- d. A demand for money or services by a third party is not a Claim.
- 11. Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
- 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
- 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
- 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
- 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
- 17. Cost of the Work—See Paragraph 13.01 for definition.
- 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- 19. Effective Date of the Contract—The date, indicated in the Agreement, on which the Contract becomes effective.
- 20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
- 21. Electronic Means—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted

by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

- 22. Engineer—The individual or entity named as such in the Agreement.
- 23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- 24. Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
- 25. Laws and Regulations; Laws or Regulations—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
- 27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
- 28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
- 29. Notice to Proceed—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
- 30. Owner—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
- 31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
- 32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

- 33. Resident Project Representative—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
- 34. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
- 36. Schedule of Values—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 37. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
- 38. Site—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
- 39. Specifications—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- 41. Submittal—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
- 42. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

- 43. Successful Bidder—The Bidder to which the Owner makes an award of contract.
- 44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
- 45. Supplier—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.

46. Technical Data

- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
- b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
- c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
- 47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
- 48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 49. Work—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
- 50. Work Change Directive—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. Intent of Certain Terms or Adjectives: The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. Day: The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).

E. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. Contract Price or Contract Times: References to a change in "Contract Price or Contract Times" or "Contract Times or Contract Price" or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term "or both" is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. Evidence of Contractor's Insurance: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. Evidence of Owner's Insurance: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 Copies of Documents

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

2.03 Before Starting Construction

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 Preconstruction Conference; Designation of Authorized Representatives

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

2.05 Acceptance of Schedules

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

2.06 Electronic Transmittals

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 Reference Standards

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

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

- 1. Contractor's Verification of Figures and Field Measurements: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
- 2. Contractor's Review of Contract Documents: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. Resolving Discrepancies

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

3.04 Requirements of the Contract Documents

A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 Reuse of Documents

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

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

- 4.01 Commencement of Contract Times; Notice to Proceed
 - A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 Starting the Work

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

4.03 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work.

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

4.04 Progress Schedule

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

4.05 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
 - 1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 - Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 - 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
 - 1. The circumstances that form the basis for the requested adjustment;
 - The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 - 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 - 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 - 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

- 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
- 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. Removal of Debris During Performance of the Work: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

- and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading of Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 Subsurface and Physical Conditions

- A. Reports and Drawings: The Supplementary Conditions identify:
 - 1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
 - Those drawings of existing physical conditions at or adjacent to the Site, including those
 drawings depicting existing surface or subsurface structures at or adjacent to the Site
 (except Underground Facilities), that contain Technical Data; and
 - 3. Technical Data contained in such reports and drawings.
- B. *Underground Facilities*: Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. Reliance by Contractor on Technical Data: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.
- D. Limitations of Other Data and Documents: Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 - the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 - 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 Differing Subsurface or Physical Conditions

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

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

- B. Engineer's Review: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. Early Resumption of Work: If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

E. Possible Price and Times Adjustments

Contractor shall be entitled to an equitable adjustment in Contract Price or Contract
Times, to the extent that the existence of a differing subsurface or physical condition, or
any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
- b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
- c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. Underground Facilities; Hazardous Environmental Conditions: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 Underground Facilities

- A. Contractor's Responsibilities: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
 - reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - complying with applicable state and local utility damage prevention Laws and Regulations;

- verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
- 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
- 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. Notice by Contractor: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review*: Engineer will:
 - 1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 - identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 - obtain any pertinent cost or schedule information from Contractor; determine the extent,
 if any, to which a change is required in the Drawings or Specifications to reflect and
 document the consequences of the existence or location of the Underground Facility; and
 - 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.
 - During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. Owner's Statement to Contractor Regarding Underground Facility: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. Early Resumption of Work: If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. Possible Price and Times Adjustments
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
- b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
- c. Contractor gave the notice required in Paragraph 5.05.B.
- 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
- 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
- 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 Hazardous Environmental Conditions at Site

- A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
 - 2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 - 3. Technical Data contained in such reports and drawings.
- B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

- conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

- 6.01 Performance, Payment, and Other Bonds
 - A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
 - B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.

- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 Insurance—General Provisions

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of

applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

H. Contractor shall require:

- 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
- 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent

- insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.
- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 Contractor's Insurance

- A. Required Insurance: Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions*: The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. Additional Insureds: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;

- 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
- 4. not seek contribution from insurance maintained by the additional insured; and
- as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 Builder's Risk and Other Property Insurance

- A. Builder's Risk: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. Property Insurance for Facilities of Owner Where Work Will Occur: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. Property Insurance for Substantially Complete Facilities: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. Partial Occupancy or Use by Owner: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. Insurance of Other Property; Additional Insurance: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 Property Losses; Subrogation

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.
 - 1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 - 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
 - 1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out

of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 Receipt and Application of Property Insurance Proceeds

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 Contractor's Means and Methods of Construction

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 Supervision and Superintendence

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

7.03 Labor; Working Hours

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

7.04 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. Contractor's Request; Governing Criteria: Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For

the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. Effect of Engineer's Determination: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. Treatment as a Substitution Request: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. Contractor's Request; Governing Criteria: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
 - Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for

- review of proposed substitute items of equipment or material from anyone other than Contractor.
- 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
- 3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.

b. will state:

- 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
- 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
- 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

c. will identify:

- 1) all variations of the proposed substitute item from the item specified; and
- 2) available engineering, sales, maintenance, repair, and replacement services.
- d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

- D. Reimbursement of Engineer's Cost: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. Effect of Engineer's Determination: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 Concerning Subcontractors and Suppliers

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall

- initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 Patent Fees and Royalties

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

costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 Permits

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

7.10 *Taxes*

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

7.11 Laws and Regulations

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

7.12 Record Documents

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

7.13 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 Hazard Communication Programs

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

7.15 Emergencies

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

7.16 Submittals

- A. Shop Drawing and Sample Requirements
 - 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

- 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
- c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
- 3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. Submittal Procedures for Shop Drawings and Samples: Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. Shop Drawings

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

2. Samples

- a. Contractor shall submit the number of Samples required in the Specifications.
- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
- Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule
 of Submittals, any related Work performed prior to Engineer's review and approval of the
 pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. Engineer's Review of Shop Drawings and Samples
 - Engineer will provide timely review of Shop Drawings and Samples in accordance with the
 accepted Schedule of Submittals. Engineer's review and approval will be only to
 determine if the items covered by the Submittals will, after installation or incorporation
 in the Work, comply with the requirements of the Contract Documents, and be
 compatible with the design concept of the completed Project as a functioning whole as
 indicated by the Contract Documents.

- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
- 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
- 5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
- 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- 7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
- 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

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

- E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs
 - 1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
 - 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03. 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to

perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:

- 1. Observations by Engineer;
- 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
- 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
- 4. Use or occupancy of the Work or any part thereof by Owner;
- 5. Any review and approval of a Shop Drawing or Sample submittal;
- 6. The issuance of a notice of acceptability by Engineer;
- 7. The end of the correction period established in Paragraph 15.08;
- 8. Any inspection, test, or approval by others; or
- 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (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 from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 Other Work

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior

- to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 Coordination

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

8.03 Legal Relationships

A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has

arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

- 9.01 Communications to Contractor
 - A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.
- 9.02 Replacement of Engineer
 - A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.
- 9.03 Furnish Data
 - A. Owner shall promptly furnish the data required of Owner under the Contract Documents.
- 9.04 Pay When Due
 - A. Owner shall make payments to Contractor when they are due as provided in the Agreement.
- 9.05 Lands and Easements; Reports, Tests, and Drawings
 - A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 *Insurance*
 - A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 Change Orders
 - A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 Inspections, Tests, and Approvals
 - A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 Limitations on Owner's Responsibilities
 - A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 Undisclosed Hazardous Environmental Condition
 - A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 Evidence of Financial Arrangements

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

9.12 Safety Programs

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

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 Owner's Representative

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

10.02 Visits to Site

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Resident Project Representative

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.

B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 Engineer's Authority

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 Determinations for Unit Price Work

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

10.06 Decisions on Requirements of Contract Documents and Acceptability of Work

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

10.07 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content

- complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 Compliance with Safety Program

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

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 Amending and Supplementing the Contract

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 Work Change Directives

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.
- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 Field Orders

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

11.05 Owner-Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 Unauthorized Changes in the Work

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract

Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
 - 1. A mutually acceptable fixed fee; or
 - 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 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 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net

- decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
- f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 Change Proposals

A. Purpose and Content: Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. Change Proposal Procedures

- 1. *Submittal*: Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
- Supporting Data: The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. Engineer's Initial Review: Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. Engineer's Full Review and Action on the Change Proposal: Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
- 5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. Resolution of Certain Change Proposals: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

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

ARTICLE 12—CLAIMS

12.01 Claims

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 - Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and

- 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. Submittal of Claim: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. Review and Resolution: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.

D. Mediation

- 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
- 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
- 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. Denial of Claim: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. Final and Binding Results: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a

Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. Purposes for Determination of Cost of the Work: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. Costs Included: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 - 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work

- plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
- 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. Construction Equipment Rental
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. Costs Excluded: The term Cost of the Work does not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
 - 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 6. Expenses incurred in preparing and advancing Claims.
 - 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. Contractor's Fee

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
- 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.
- E. Documentation and Audit: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

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

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. Adjustments in Unit Price

- 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
- The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
- 3. Adjusted unit prices will apply to all units of that item.

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

14.01 Access to Work

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

14.02 Tests, Inspections, and Approvals

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

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

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. Contractor's Obligation: It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

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

14.04 Acceptance of Defective Work

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

14.05 Uncovering Work

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

- If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
- 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

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

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

A. Basis for Progress Payments: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. Applications for Payments

- At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
- 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
- Beginning with the second Application for Payment, each Application must include an
 affidavit of Contractor stating that all previous progress payments received by Contractor
 have been applied to discharge Contractor's legitimate obligations associated with prior
 Applications for Payment.
- 4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

- Engineer will, within 10 days after receipt of each Application for Payment, including each
 resubmittal, either indicate in writing a recommendation of payment and present the
 Application to Owner, or return the Application to Contractor indicating in writing
 Engineer's reasons for refusing to recommend payment. In the latter case, Contractor
 may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;

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

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

D. Payment Becomes Due

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

E. Reductions in Payment by Owner

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

- after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work,

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

15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 Final Inspection

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

15.06 Final Payment

A. Application for Payment

- After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
- 2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. Engineer's Review of Final Application and Recommendation of Payment: If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. Notice of Acceptability: In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. Completion of Work: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. Final Payment Becomes Due: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 Waiver of Claims

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 Correction Period

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an

emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.

- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

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

16.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.

- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 Owner May Terminate for Convenience

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in

- connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
- 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

- A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 - agree with the other party to submit the dispute to another dispute resolution process;
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 Computation of Times

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

18.03 Cumulative Remedies

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

18.04 Limitation of Damages

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

18.05 No Waiver

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

18.06 Survival of Obligations

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

18.07 *Controlling Law*

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

18.08 Assignment of Contract

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

18.09 Successors and Assigns

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

18.10 Headings

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

SUPPLEMENTARY	CONDITIONS OF	THE CONSTRUCTION
	CONTRACT	

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
Article 1— Definitions and Terminology	169
Article 2— Preliminary Matters	169
Article 3— Contract Documents: Intent, Requirements, Reuse	173
Article 4— Commencement and Progress of the Work	173
Article 5— Site, Subsurface and Physical Conditions, Hazardoud Environmental Conditions	s .173
Article 6— Bonds and Insurance	174
Article 7— Contractor's Responsibilities	178
Article 8— Other Work at the Site	179
Article 9— Owner's Responsibilities	179
Article 10— Engineer's Status During Construction	179
Article 11— Changes to the Contract	179
Article 12— Claims	179
Article 13— Cost of Work; Allowances, Unit Price Work	179
Article 14— Tests and Inspections; Correction, Removal, or Acceptance of Defective World	k 179
Article 15— Payments to Contractor, Set Offs; Completions; Correction Period	179
Article 16— Suspension of Work and Termination	179
Article 17— Final Resolutions of Disputes	180
Article 18— Miscellaneous	180
Exhibit A— Software Requirements for Electronic Document Exchange	181

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

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

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

-NONE-

ARTICLE 2—PRELIMINARY MATTERS

- 2.02 Copies of Documents
- SC-2.02 Amend the first sentence of Paragraph 2.02.A. to read as follows:

Owner shall furnish to Contractor **2** printed copies of the Contract Documents (including one fully signed counterpart of the Agreement), and **one copy** in electronic portable document format (PDF).

- 2.06 Electronic Transmittals
- SC-2.06 Delete Paragraphs 2.06.B and 2.06.C in their entirety and insert the following in their place:
 - B. *Electronic Documents Protocol:* The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol ("EDP" or "Protocol") for exchange of electronic transmittals.
 - 1. Basic Requirements
 - a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.
 - b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.
 - c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.

- d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.
- e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party's use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.
- f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.

System Infrastructure for Electronic Document Exchange

- a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.
 - 1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is **20** MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.
 - Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.
- b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.
- c. Each party will operate and maintain industry-standard, industry-accepted, ISO-standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash

- drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.
- d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.
- e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.
- f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.
- g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.
- C. Software Requirements for Electronic Document Exchange; Limitations
 - Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.
 - a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.
 - 2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.
 - 3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Exhibit A to this EDP, including software versions, if listed.

- SC-2.06 Supplement Paragraph 2.06 of the General Conditions by adding the following paragraph:
 - D. Requests by Contractor for Electronic Documents in Other Formats
 - Release of any Electronic Document versions of the Project documents in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be at the sole discretion of the Owner.
 - 2. To extent determined by Owner, in its sole discretion, to be prudent and necessary, release of Electronic Documents versions of Project documents and other Project information requested by Contractor ("Request") in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be subject to the provisions of the Owner's response to the Request, and to the following conditions to which Contractor agrees:
 - a. The content included in the Electronic Documents created by Engineer and covered by the Request was prepared by Engineer as an internal working document for Engineer's purposes solely, and is being provided to Contractor on an "AS IS" basis without any warranties of any kind, including, but not limited to any implied warranties of fitness for any purpose. As such, Contractor is advised and acknowledges that the content may not be suitable for Contractor's application, or may require substantial modification and independent verification by Contractor. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.
 - b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Engineer to Contractor under the request are only for convenience of Contractor. Any conclusion or information obtained or derived from such data will be at the Contractor's sole risk and the Contractor waives any claims against Engineer or Owner arising from use of data in Electronic Documents covered by the Request.
 - c. Contractor shall indemnify and hold harmless Owner and Engineer and their subconsultants from all claims, damages, losses, and expenses, including attorneys' fees and defense costs arising out of or resulting from Contractor's use, adaptation, or distribution of any Electronic Documents provided under the Request.
 - d. Contractor agrees not to sell, copy, transfer, forward, give away or otherwise distribute this information (in source or modified file format) to any third party without the direct written authorization of Engineer, unless such distribution is specifically identified in the Request and is limited to Contractor's subcontractors. Contractor warrants that subsequent use by Contractor's subcontractors complies with all terms of the Contract Documents and Owner's response to Request.
 - In the event that Owner elects to provide or directs the Engineer to provide to Contractor any Contractor-requested Electronic Document versions of Project information that is not explicitly identified in the Contract Documents as being available to Contractor, the Owner shall be reimbursed by Contractor on an hourly basis (at

\$[number] per hour) for any engineering costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Engineer.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

-NONE-

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

-NONE-

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

- 5.03 Subsurface and Physical Conditions
- SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:
 - E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely: [If there are no such reports, so indicate in the table.]

Report Title	Date of Report	Technical Data
Report of Geotechnical Exploration	August 4, 2021	Site and subsurface conditions
Frankfort Plant Board Capital Plaza		
Substation		

F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely: [If there are no such drawings, so indicate in the table.]

Drawings Title	Date of Drawings	Technical Data
NONE		

- G. Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at **[location]** during regular business hours, or may request copies from Engineer.
- 5.06 Hazardous Environmental Conditions

- SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:
 - 4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely:

Report Title	Date of Report	Technical Data
NONE		

5. The following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely: [If there are no such drawings, so indicate in the table]

Drawings Title	Date of Drawings	Technical Data
NONE		

SC-5.06 Delete Paragraph 5.06.I in its entirety.

ARTICLE 6—BONDS AND INSURANCE

- 6.01 Performance, Payment, and Other Bonds
- SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:
 - 1. Required Performance Bond Form: The performance bond that Contractor furnishes will be in the form of EJCDC® C-610, Performance Bond (2010, 2013, or 2018 edition).
 - 2. Required Payment Bond Form: The payment bond that Contractor furnishes will be in the form of EJCDC® C-615, Payment Bond (2010, 2013, or 2018 edition).
- SC-6.01.H. Amend the first sentence of Paragraph 6.01.H.1 to read as follows:

Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds on a primary and non-contributary basis, Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and

- 6.02 Insurance—General Provisions
- SC-6.02 Add the following paragraph Immediately after Paragraph 6.02.B:
 - Contractor may obtain worker's compensation insurance from an insurance company
 that has not been rated by A.M. Best, provided that such company (a) is domiciled in
 the state in which the Project is located, (b) is certified or authorized as a worker's
 compensation insurance provider by the appropriate state agency, and (c) has been

accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

6.03 Contractor's Insurance

- SC 6.03.C. Amend the first sentence of Paragraph 6.01.C.1 to read as follows:
 - include and list as additional insureds on a primary and non-contributary basis, Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
- SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:
 - D. Other Additional Insureds: As a supplement to the provisions of Paragraph 6.03.C of the General Conditions, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer) the following: NONE
 - E. Workers' Compensation and Employer's Liability: Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap employer's liability coverage for monopolistic states, and foreign voluntary workers' compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

Workers' Compensation and Related Policies	Policy limits of not less than:
Workers' Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman's)	Statutory
Foreign voluntary workers' compensation (employer's responsibility coverage), if applicable	Statutory
Employer's Liability	
Each accident	\$1,000,000
Each employee	\$1,000,000
Policy limit	\$5,000,000

- F. Commercial General Liability—Claims Covered: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
 - damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 - 2. damages insured by reasonably available personal injury liability coverage, and
 - 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. Commercial General Liability—Form and Content: Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:

- 1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
- 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
- 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
- 4. Underground, explosion, and collapse coverage.
- 5. Personal injury coverage.
- 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
- For design professional additional insureds, ISO Endorsement CG 20 32 07 04
 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named
 Insured" or its equivalent.
- H. Commercial General Liability—Excluded Content: The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
 - Any modification of the standard definition of "insured contract" (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 - 2. Any exclusion for water intrusion or water damage.
 - 3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 - 4. Any exclusion of coverage relating to earth subsidence or movement.
 - 5. Any exclusion for the insured's vicarious liability, strict liability, or statutory liability (other than worker's compensation).
 - 6. Any limitation or exclusion based on the nature of Contractor's work.
 - 7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.
- 1. Commercial General Liability—Minimum Policy Limits

Commercial General Liability	Policy limits of not
	less than:
General Aggregate	\$5,000,000
Products—Completed Operations Aggregate	\$5,000,000
Personal and Advertising Injury	\$5,000,000

Commercial General Liability	Policy limits of not less than:
Bodily Injury and Property Damage—Each Occurrence	\$5,000,000

 Automobile Liability: Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

Automobile Liability	Policy limits of not
	less than:
Bodily Injury	
Each Person	\$5,000,000
Each Accident	\$5,000,000
Property Damage	
Each Accident	\$5,000,000
[or]	
Combined Single Limit	
Combined Single Limit (Bodily Injury and Property	\$5,000,000
Damage)	

K. Umbrella or Excess Liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not
	less than:
Each Occurrence	\$10,000,000
General Aggregate	\$10,000,000

Contractor's Pollution Liability	Policy limits of not less than:
Each Occurrence/Claim	\$3,000,000
General Aggregate	\$3,000,000

N. Contractor's Professional Liability Insurance: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. The retroactive date on the policy must pre-date the commencement of furnishing services on the Project.

Contractor's Professional Liability	Policy limits of not less than:
Each Claim	\$3,000,000
Annual Aggregate	\$3,000,000

O. P. Unmanned Aerial Vehicle Liability Insurance: If Contractor uses unmanned aerial vehicles (UAV—commonly referred to as drones) at the Site or in support of any aspect of the Work, Contractor shall obtain UAV liability insurance in the amounts stated; name Owner, Engineer, and all individuals and entities identified in the Supplementary Conditions as additional insureds; and provide a certificate to Owner confirming Contractor's compliance with this requirement. Such insurance will provide coverage for property damage, bodily injury or death, and invasion of privacy.

Unmanned Aerial Vehicle Liability Insurance	Policy limits of not less than:
Each Claim	\$
General Aggregate	\$

- Q. Other Required Insurance: NONE
- 6.04 Builder's Risk and Other Property Insurance
- SC-6.04 Delete Paragraph 6.04 in its entirety
- 6.05 Property Losses; Subrogation
- SC-6.05 Delete Paragraph 6.05.B in its entirety

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

- SC 7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:
 - 1. Regular working hours will be 8:00 AM to 5:00 AM
 - 2. Owner's legal holidays are New Years Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Thanksgiving, Friday after Thanksgiving, Christmas Eve, Christmas Day.

7.18 Indemnification

SC 7.18 Amend the first sentence of Paragraph 7.18.A to read as follows:

To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from claims, losses, damages, costs, and judgments (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 from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to

damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, caused by any act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

ARTICLE 8—OTHER WORK AT THE SITE
-NONE-
ARTICLE 9—OWNER'S RESPONSIBILITIES
-NONE-
ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION
-NONE-
ARTICLE 11—CHANGES TO THE CONTRACT
-NONE-
ARTICLE 12—CLAIMS
-NONE-
ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK
-NONE-
ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCCEPTANCE OF DEFECTIVE WORK
-NONE-
ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD
-NONE-
ARTICLE 16—SUSPENSION OF WORK AND TERMINATION
-NONE-

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

-NONE-

ARTICLE 18—MISCELLANEOUS

-NONE-

ARTICLE 19—EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

Add a new Article 19, EEO Requirements after Article 18.

SC-19 Add the following new paragraph as the beginning of Article 19.

19.01 EEO Requirements

A. Bidder shall abide by the requirements under Executive Order No. 11246, as amended, including specifically the provisions of the Equal Opportunity Clause set forth in the General Conditions. Moreover, bidder shall abide by the requirement of 41 CFR § 60-1.4(A), 60-300.5(A) and 60-741.5(A). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Furthermore, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veterans status or disability.

EXHIBIT A—SOFTWARE REQUIREMENTS FOR ELECTRONIC DOCUMENT EXCHANGE

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)		
a.1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	Email	Email			
a.2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	Email w/ Attachment	PDF	(2)		
a.3	Contactors Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment.	Email w/ Attachment	PDF			
a.4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals.	Email w/ Attachment or LFE	PDF			
a.5	Layouts and drawings to be submitted to Owner for future use and modification.	Email w/ Attachment or LFE	DWG			
a.6	Correspondence, reports and Specifications to be submitted to Owner for future word processing use and modification.	Email w/ Attachment or LFE	DOC			
a.7	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	EXC			
a.8	Database files and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	DB			
Notes						
(1)	All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.					
(2)	Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions.					
Key						
Email	Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies					
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive)					
PDF	Portable Document Format readable by Adobe® Acrobat Reader Version [number] or later					
DWG	Autodesk® AutoCAD .dwg format Version [number]					
DOC	Microsoft® Word .docx format Version [number]					
EXC	Microsoft® Excel .xls or .xml format Version [number]					
DB	Microsoft® Access .mdb format Version [number]					

SUMMARY OF WORK

ARTICLE 1—WORK COVERED BY CONTRACT DOCUMENTS

- 1.01 Supply all labor, equipment, materials, supervision, material testing, and other incidental items required to perform the following general tasks:
 - A. Remove and dispose of existing foundations as shown on the Contract Drawings. If existing foundations to be removed are in areas where no new foundations are to be installed, remove foundation to existing grade only.
 - B. Install new foundations as shown on the Contract Drawings
 - C. Install new yard stone as required to repair disturbed areas.
 - D. Provide temporary buildings, trailers or structures required for the Contractor's work, including offices, a telephone, sanitary facilities, office equipment, furniture, and other items necessary for the performance of Work.
 - E. Coordinate with the Owner in the development of outdoor storage space, parking areas and construction site offices. These areas are to be developed in close proximity to the Work area and shall not impinge in any way on property not owned by the Owner.
 - F. Provide all secured areas for storage of tools, equipment and materials to be installed or used in the installation of Contract Work. Contractor shall be responsible for all items until accepted by the Owner in conformance with the Contract Documents.
 - G. Provide weather protection, including temporary heat, electric power, plastic coverings, or other items required for the protection of materials for installation, or being installed on site, until the Contract Work is accepted by the Owner.
 - H. Furnish and erect or install any staging, shoring, bracing, temporary steel and any and all false work of any character, whatsoever, necessary for the erection of the Contractor's work. Include any relocation of equipment, and all such items shall be furnished, placed, and removed by the Contractor.

1.02 Some equipment inside the substation will be energized during construction.

ARTICLE 2—WORK BY OWNER/OTHERS

-NONE-

ARTICLE 3—OWNER-FURNISHED ITEMS

-NONE-

ARTICLE 4—CONTRACT INTERFACES

- 4.01 The Contractor shall interface with additional Contracts supplying materials to the site in accordance with the following guidelines:
 - A. The Contractor will unload, inventory, store and protect all delivered material. Owner is to be informed of discrepancies in delivered versus expected items, and of any damage encountered during shipping.

ARTICLE 5—SITE VISIT

-NONE-

ARTICLE 6—MILESTONES

A	Substation Contract – Notice of Award Issued	June 22, 2022
В	Transformer Foundation T54 Complete	August 10, 2022
С	Remaining Phase-1 Foundations Complete	September 14, 2022
D	Phase-2 Foundations Complete	March 15, 2023
Е	Substantial Completion	March 15, 2023
F	Final Completion	March 30, 2023



PRICE AND PAYMENT PROCEDURES

ARTICLE 1—SCHEDULE OF VALUES

- 1.01 Submit preliminary Schedule of Values in duplicate within 10 days after Effective Date of Agreement in accordance with Article 2 of the General Conditions.
 - A. Format:
 - 1. Mobilization
 - 2. Schedules
 - 3. Bonds and Insurance
 - 4. Foundation removal & disposal
 - 5. Foundation installation
 - 6. Cleanup, Contract Closeout and Project Records
 - B. Include in each line item, a directly proportional amount of Contractor's overhead and profit.
 - C. Revise Schedule of Values to list approved Change Orders, with each Application for Payment.

ARTICLE 2—PAYMENT PROCEDURES

- 2.01 Reference Article 15 of General Condition and Supplementary Condition. Submit an electronic copy of each Application for Payment using the form provided in the Contract Documents.
- 2.02 Utilize latest approved Schedule of Values for listing items in Application for Payment.
- 2.03 Payment Period: at intervals stipulated in the Agreement.
- 2.04 Submit an updated Progress Schedule with each Application for Payment in accordance with the Submittal Procedures.

ARTICLE 3—CHANGE PROCEDURES

- 3.01 Reference Article 11 of the General Conditions
- 3.02 Field Order: issued by Engineer or Owner to advise of minor changes in the Work not involving an adjustment to Contract Price or Contract Time as authorized by Paragraph 11.04 of the General Conditions.
- 3.03 Work Change Directive: issued by Engineer or Owner using Work Change Directive Form, signed by Engineer or Owner and instructing Contractor to proceed with a change in the Work. Work authorized in a Work Change Directive will be included in a subsequent Change Order. Document will describe changes



- in the Work, and designate method of determining any change in Contract Price or Contract Time. Promptly execute the change.
- 3.04 Change Order: issued by Engineer or Owner using Change Order Form in accordance with the General Conditions.
 - A. Stipulated Price Change Order: based on Contractor's maximum price quotation or Contractor's request for a Change Order as approved by Engineer or Owner.
 - B. Unit Price Change Order: for pre-determined unit prices and quantities and executed on a fixed unit price basis. Execute Work under a Work Change Directive for unit costs or quantities of work not pre-determined. Changes in Contract Price and Contract Time to be computed as specified for Time and Material Change Order
 - C. Time and Material Change Order: based on itemized account and supporting data after completion of change within time limits indicated in the General Conditions. Engineer or Owner and Contractor to determine the change allowable in Contract Price and Contract Time as provided in the General Conditions. Maintain detailed records of work done on this basis, provide full information required for evaluation of proposed changes, and substantiate costs for changes in the Work

ARTICLE 4—MEASUREMENT AND PAYMENT FOR UNIT PRICES

- 4.01 Take measurements and compute quantities. Engineer or Owner to verify measurements and quantities.
- 4.02 Unit Quantities: quantities and measurements indicated in the Bid Form are for contract purposes only. Actual quantities and measurements supplied or placed in the Work determine payment.
- 4.03 Payment includes full compensation for required labor, material and equipment, tools, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; and overhead and profit.

ARTICLE 5—CORRELATION OF SUBMITTALS

- 5.01 Promptly revise Schedule of Values and Applications for Payment to record each authorized Change Order as a separate line item and adjust the Contract Price.
- 5.02 Promptly revise Progress Schedules to reflect any change in Contract Time and revise sub-schedules to adjust time for other items of the Work affected by the change.
- 5.03 Promptly enter changes in Project Record Documents.



PROJECT MANAGEMENT AND COORDINATION

ARTICLE 1—GENERAL

- 1.01 Inform Owner and Engineer of the address for sending official correspondence and the address and telephone number of Contractor's representative who will be Project Manager for the Contract and responsible and available outside of normal working hours for emergency repairs and maintenance of safety devices.
- 1.02 During periods of construction and testing keep Owner and Engineer informed in writing with name, address, and telephone number of Contractor's representative who will be responsible and available outside of normal working hours for emergency repairs and the maintenance of safety devices.
- 1.03 Identify correspondence, drawings, data and materials, packing slips or other items associated with this Contract as: **Capital Plaza Substation**
- 1.04 Coordinate scheduling, submittals, and Work of the various Specifications to effectuate an efficient and orderly sequence for installing interdependent construction elements, with provisions for accommodating items installed later.
- 1.05 Coordinate Work of the various Specifications with interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- 1.06 Coordinate space requirements and installation of mechanical and electrical work which are indicated by diagram on Drawings. Follow routing shown for pipes, building. Utilize spaces efficiently to maximize accessibility for other installations, maintenance, and repairs.
- 1.07 In finished areas (except as otherwise indicated), conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- 1.08 Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy.
- 1.09 After Owner occupancy of premises, coordinate access to site for correction of defective Work and/or incomplete Work to minimize disruption of Owner's activities.
- 1.10 Provide coordination in accordance with Article 8 of the General Conditions.

ARTICLE 2—INITIAL CONFERENCE

- 2.01 Owner to schedule an initial conference in accordance with the General Conditions Paragraph 2.04.
- 2.02 Agenda
 - A. Distribute Contract Documents



- B. Discuss design concepts
- C. Discuss preliminary Progress Schedule, Schedule of Submittals, Schedule Values and preliminary cash flow projections.
- D. Designate personnel representing each party
- E. Procedures and processing of submittals, substitutions, applications for payments Change Orders and Contract closeout procedures
- F. Scheduling
- 2.03 Record minutes and distribute draft copies within 2 days after meeting to Owner and Engineer for review. Revise as required and distribute within 5 days thereafter to meeting participants, with copies to Owner and Engineer, and those affected by decisions made.

ARTICLE 3—SITE MOBILIZATION MEETING

- 3.01 Owner to schedule a meeting at the Project site before Contractor occupancy.
- 3.02 Attendance Required: Owner, Contractor, Contractor's Superintendent, Suppliers and Subcontractors.
- 3.03 Agenda:
 - A. Use of premises by Owner and Contractor
 - B. Owner's requirements and partial occupancy
 - C. Construction facilities and controls provided by Owner
 - D. Temporary utilities provided by Owner and Contractor
 - E. Security and housekeeping procedures
 - F. Schedules
 - G. Procedures for maintaining record documents
 - H. Requirements for start-up of equipment
 - I. Inspection and acceptance of equipment put into service during construction period
 - J. Access, laydown and coordination with others
- 3.04 Record minutes and distribute draft copies within 2 days after meeting to Owner for review. Revise as required and distribute within 5 days thereafter to meeting



participants, with copies to Owner and Engineer, and those affected by decisions made.

ARTICLE 4—PROGRESS MEETINGS

- 4.01 Owner to schedule a progress meeting no later than 10 days after the Initial Conference and *weekly* throughout progress of the Work. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- 4.02 Record minutes and distribute draft copies within 2 days after meeting to Owner for review. Revise as required and distribute within 5 days thereafter to meeting participants, with copies to Owner and Engineer, and those affected by decisions made.
- 4.03 Attendance: Contractor, major Subcontractors and Suppliers, Owner and Engineer as appropriate to agenda topics for each meeting.
- 4.04 Agenda:
 - A. Review minutes of previous meetings
 - B. Unresolved Issues
 - C. Review Work progress
 - D. Observations, problems, and decisions
 - E. Identification of problems which impede planned progress
 - F. Review of Schedule of Submittals and status of submittals
 - G. Review of off-site fabrication and delivery schedules
 - H. Maintenance of progress schedule
 - I. Corrective measures to regain projected schedules
 - J. Planned progress during succeeding work period
 - K. Coordination of projected progress
 - L. Maintenance of quality and work standards
 - M. Effect of proposed changes on Progress Schedule and coordination
 - N. Other business relating to Work

ARTICLE 5—PREINSTALLATION CONFERENCE

- 5.01 When required, convene a pre-installation conference at Site before commencing Work.
- 5.02 Require attendance of parties directly affecting, or affected by, Work of the specific Specification section. Notify Owner and Engineer 5 days in advance of meeting date.
- 5.03 Make arrangements for meeting, prepare agenda, and preside at conference.

- 5.04 Record minutes and distribute draft copies within 2 days after meeting to Owner and Engineer for review. Revise as required and distribute within 5 days thereafter to meeting participants, with copies to Owner, Engineer, and those affected by decisions made.
- 5.05 Review conditions of installation, preparation and installation procedures, and coordination with related work.



ATTACHMENT #A

INDEPENDENT MATERIALS TESTING SERVICES

Obtain and pay for independent testing services to perform concrete, soils and asphalt testing. Obligation to perform work in accordance with requirements of Contract Documents is not relieved by employment of independent testing services.

ARTICLE 1—QUALITY ASSURANCE

- 1.01 Testing Service Staff
 - A. Maintain a full-time registered Engineer on staff to supervise services.
 - B. Personnel trained and experienced in the necessary skills, familiar with the standards specified for inspection and testing and familiar with local conditions.
- 1.02 Testing equipment: calibrated at reasonable intervals with devices of and accuracy traceable to either the National Institute of Standards and Technology (NIST) or accepted values of natural physical constants. Calibration documentation to be submitted upon request by the Owner.
- 1.03 Owner has right to inspect the operations of the testing service at any time.
- 1.04 If incongruencies or unacceptable testing practices are observed, the Contractor will be notified that action is required to correct the situation. If such incongruencies continue, the Owner has the right to require: 1) replacement of any testing service personnel, or 2) a new testing service be obtained.

ARTICLE 2—SUBMITTALS

2.01 Within 14 days after Execution of Contract, submit complete data relative to the testing service proposed for this work for approval by the Owner. Information shall include, but not be limited to a listing of all work done by the testing service within the past five years. Include location, name of project, Owner, and a summary of services performed.

ARTICLE 3—TESTING REPORTS

- 3.01 After each inspection and test, promptly submit two copies of laboratory report to Owner in accordance with Sections 01 33 00. Include the following.
 - A. Date issued
 - B. Project title and location
 - C. Name of Inspector
 - D. Date and time of sampling, testing or inspection
 - E. Identification of specification section



- F. Location on the site
- G. Type of inspection or test
- H. Date of test
- I. Results of tests
- J. Conformance with Contract Documents
- 3.02 Provide interpretation of test results when requested by Owner.

ARTICLE 4—SOILS, CONCRETE AND STONE TESTING

- 4.01 Provide supervision, labor, equipment, materials to conduct the tests and inspections specified in the Technical Requirements.
- 4.02 Inform the Owner immediately upon finding tests that do not conform to the specifications.
 - A. Perform and pay for additional tests that are requested by the Owner.



TESTING LABORATORY SERVICES

ARTICLE 1—RESPONSIBILITIES AND RIGHT

- 1.01 Provide all supervision, labor, materials, facilities, services and other items needed, and perform all inspecting and testing of soils, earthwork, and materials required under Sections 03 30 00, 31 23 35, and 32 15 40 of this document, and all applicable codes and standards pertaining thereto.
- 1.02 Maintain quality personnel on site as necessary to perform all Work to the satisfaction of the Owner and Engineer.
- 1.03 Provide quality assurance and testing for all fill areas, backfill in trenches, on the site surface during proof-rolling, for the surfacing materials, and for compliance with material quality and compaction requirements.
- 1.04 Use only personnel who are thoroughly trained and experienced in the necessary skills, completely familiar with the requirements specified, the pertinent portions of the Contract Documents, the particular geographic and geologic areas in which construction is taking place, and the selected standards for inspection and testing, and who are approved for this purpose by the Owner.
- 1.05 The Owner and Engineer reserve the right to remove from the site at any time, individual testers who, because of incompetence or carelessness, fail to perform tests in accordance with accepted practice.

ARTICLE 2—QUALITY ASSURANCE

- 2.01 Provide quality assurance and testing for the following activities:
 - A. Correct gradations of site surfacing materials;
 - B. Proper compaction of subgrade and of site surfacing materials;
 - C. Proper compaction of trench bottoms before installing trenching materials;
 - D. Proper compaction of trench backfill;
 - E. Proper strength of concrete mix and of concrete cast-in-place;
 - F. Proper slump;
 - G. Such other concrete quality tests as required by Owner;

ARTICLE 3—REFERENCES

- 3.01 American Association of State Highway and Transportation Officials (AASHTO):
 - A. T217
- 3.02 American Society for Testing and Materials (ASTM)
 - A. D698
 - B. D1557



- C. D2216
- D. D3017

ARTICLE 4—SUBMITTALS

- 4.01 Laboratory and individual information as indicated in Section 2.01 of this specification document.
- 4.02 Results of all laboratory tests, including basic curves and analyses performed to establish points of comparison of ideal conditions.

ARTICLE 5—LABORATORY AND INDIVIDUAL INFORMATION

- 5.01 Within 7 days after Notice to Proceed, submit complete data relative to the testing laboratory proposed for this Work for approval by the Owner. Information shall include, but not be limited to:
 - A. Provide testing laboratory facilities required to satisfactorily perform the testing required under this Section, pertinent to the other sections of this document referenced, and within the increments of time essential to timely completion of the work.
 - B. Owner and Engineer have right to inspect at any time the facilities and operations of the testing laboratory.
 - C. If incongruities and/or unacceptable testing practices are observed, the Contractor will be notified that action is required to correct the situation. If such incongruities continue, the Owner and Engineer have the right to require either 1) replacement of any or all laboratory personnel, or 2) a new testing laboratory be obtained.

ARTICLE 6—LABORATORY FACILITIES

- 6.01 Within 7 days after Notice to Proceed, submit complete data relative to the testing laboratory proposed for this Work for approval by the Owner. Information shall include, but not be limited to:
 - A. Qualifications of individual personnel, including brief history of all individuals Contractor proposes to employ for inspection and testing.
 - B. A listing of all work done by the laboratory within the past 5 years. Include location, name of project, Owner, and a summary of services performed.
 - C. A listing of all equipment proposed for use on this Project. Include date purchased and age of equipment.



ARTICLE 7—RESPONSIBILITY OF CONTRACTOR AND SOILS TESTING LABORATORY

- 7.01 The Contractor shall be responsible for obtaining and utilizing a testing laboratory to perform the test required by this Contract.
- 7.02 Perform in-place density and moisture content determinations to verify that the fill is being compacted to the criteria required.
- 7.03 Perform in-place moisture content tests using the quick-dry procedure in accordance with SCS 19-S-11, the speedy moisture tester in accordance with AASHTO T217, or by nuclear methods in accordance with ASTM D3017. Calibrate testers by oven drying in accordance with ASTM D2216.
- 7.04 Use ASTM D698, Method C to establish moisture-density relationships to act as a standard for maximum dry densities and optimal moisture contents.
- 7.05 Inspect excavations to detect unanticipated conditions which may affect structure foundation performance. Observe too moist or too dry soil conditions, organics in place, or other Specification deviations and direct replacement of unacceptable material to assure adequate bearing capacity.
- 7.06 Perform additional tests when soil material consistency changes or as directed by the Engineer.
- 7.07 Results of all tests specified within shall be provided with Applications for Payment.

SUBMITTAL PROCEDURES

ARTICLE 1—GENERAL PROCEDURES

- 1.01 Transmit each submittal using the Shop Drawing Transmittal Form.
- 1.02 Attach a copy of the transmittal form to each group of Shop Drawings, manufacturer's literature, equipment Data and Samples submitted. Use a sufficient number of transmittal forms so that:
 - A. items on a single transmittal form pertain to the same equipment item, specification section or element of Work;
 - B. items on a single transmittal form are either original submittals or the same number resubmittal; and
 - C. each material sample is listed on a separate transmittal form.
- 1.03 Schedule submittals to expedite the Project and coordinate with schedules required by Article 3 of this Section. Deliver each submittal to Engineer with copy to Owner at following addresses. Coordinate submission of related items.
 - A. Address correspondence to Engineer as follows:

Power Centric Solutions

P.O. Box 247 Gallatin, TN 37066

Attention: Adam Stevenson, Project Manager

Phone: 615-218-5813

Email: astevenson@pwrcentric.com

B. Address correspondence to Owner as follows:

Frankfort Plant Board

305 Hickory Drive, Frankfort, KY 40602

Attention: Eli Adamson, Electrical Engineer

Phone: 502-352-4435

Email: eadamson@fewpb.com

- C. Present submittals in a clear and thorough manner and use sheet size of not less than 8-1/2 by 11 inches and not more than 24 by 36 inches. Provide space for Contractor, Engineer, and Owner's review stamps.
- D. Complete the submittal transmittal form as indicated, numbering each submittal consecutively. Assign resubmittals the same transmittal number as the original with a suffix of a sequential letter to indicate the resubmittal (e.g. the first resubmittal of submittal 25 would be number 25A.) Include only those documents previously issued under original transmittal number in resubmittals. Do not combine new submittals with resubmittals.



- E. Submittals which do not have a fully completed transmittal form will be returned along with un-reviewed attachments. Returned submittals, even though incomplete, will be counted as a submittal in accordance with the Supplementary Conditions.
- F. Revise and resubmit documents as required. Identify all changes made since previous submittal. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions. Submittals not requested on the submittal schedule will not be recognized or processed.

ARTICLE 2—CONSTRUCTION PROGRESS SCHEDULE

- 2.01 Submit preliminary and final Progress Schedule as specified in Article 2 of the General Conditions or as established in Notice to Proceed.
- 2.02 Submit revised Progress Schedule on monthly basis and with each Application for Payment, identifying changes since previous version.
- 2.03 Submit a horizontal bar chart (GANTT schedule) with separate line for each section of Work, identifying first work day of each week. Coordinate content with Schedule of Values.
- 2.04 Submit complete factory fabrication and delivery schedules for all major equipment indicated in the Schedule of Values.
- 2.05 Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.
- 2.06 Indicate estimated percentage of completion for each item of Work at each submission.
- 2.07 Indicate dates for fabrication, factory testing, delivery, shipping and field testing, and material and equipment delivery dates, including those furnished by Owner. Coordinate with Schedule of Submittals.
- 2.08 Include a narrative of problems experienced that could impact progress of work.

ARTICLE 3—SCHEDULE OF SUBMITTALS

- 3.01 Submit preliminary and final Schedule of submittals as specified in Article 2 of the General Conditions or as established in Notice to Proceed. Include all submittals specified in the Specifications.
- 3.02 Include description of each Submittal, date by which each Submittal will be delivered to Engineer and Owner date by which each submittal must be approved to maintain project schedule, and relevant specification section reference.

3.03 Allow 10-15 days for Engineer review of submittals and possible resubmittal from receipt of submittal/resubmittal.

ARTICLE 4—SHOP DRAWINGS AND SAMPLES

- 4.01 Submit in accordance with paragraph 7.16 of the General Conditions and coordinate with the Schedule of Submittals required in Article 2 of this Section.
- 4.02 Submission of any Shop Drawing or Sample bearing Contractor's and Engineer's approval shall constitute a representation to Owner that the requirements of paragraph 7.16 of the General Conditions have been fulfilled.
- 4.03 Manufacturers' Installation Instructions and Certificates
 - A. Submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing. Indicate special procedures, perimeter conditions requiring special attention and special environmental criteria required for application or installation.
 - B. Submit manufacturers' certificates for recent or previous test results on material or equipment, but they must be acceptable to Engineer and Owner. Indicate material or equipment conforms to or exceeds specified requirements and provide supporting reference date, affidavits, and certifications as appropriate.
- 4.04 Submit test results, data, and reports and certifications to Engineer based on tests performed. Submit test reports and certifications for Independent Testing Services as specified in the Quality Requirements.
- 4.05 Submit test reports as specified in the Independent Testing Services section to includes as a minimum, the description and function of equipment, set point and operating parameters, checklists, calibration and alignment records (if applicable), testing documentation and applicable drawings.
- 4.06 Submit the following quantities if providing in hardcopy. Otherwise submit in PDF format to Engineer and Owner.



ITEM	QUANTITIES (HARDCOPY)
Professional Design Submittals	3 (2 to Engineer, 1 to Owner)
Shop Drawings	3 (2 to Engineer, 1 to Owner)
Manufacturer's date, brochures, instructions, and certificates	3 (2 to Engineer, 1 to Owner)
Samples	3 (2 to Engineer, 1 to Owner)
Quality Assurance/Control Submittals	3 (2 to Engineer, 1 to Owner)
Test Reports	3 (2 to Engineer, 1 to Owner)

- 4.07 Identify variations from Contract Documents and material and equipment or system limitations which may be detrimental to successful performance of the completed Work and identify reasons therefore in the space provided on the transmittal form or in a referenced serial letter. Clearly identify requests for "Or-Equal" items and submit per paragraph 7.05 of General Conditions. Requests for Substitutions shall be made per the Quality Requirement section.
- 4.08 Engineer to complete review in accordance with Paragraph 7.16 of the General Conditions and will return reviewed submittals to Contractor with the following provided for each item submitted.



Where:

[&]quot;Approved" indicates submittal has been reviewed and appears to be in

conformance with requirements of the Contract Documents. Proceed as shown on the submittal.

"Make Corrections Noted" indicates submittal appears to be in conformance with requirements of the Contract Documents. Incorporate the corrections noted and proceed as shown on the submittal. No resubmittal is required.

"Amend and Resubmit" indicates submittal does not appear to be in conformance with the Contract Documents. Engineer's comments will be noted on the submittal or in a separate, cross-referenced document. Re-check, make necessary revisions and resubmit in accordance with paragraph 7.16.D of the General Conditions.

"Reference" indicates that the submittal is for reference only and that Engineer has not reviewed the material.

"Submittal Not Required-No Action Taken" indicates that the submittal is not called for by the Contract Documents and that Engineer has not reviewed the material.

ARTICLE 5—RECORD DOCUMENTS

- 5.01 Submit full set of record documents to Engineer per paragraph 7.12 of the General Condition with claim for final Application for Payment. Coordinate with the Closeout Procedures section.
- 5.02 Store Record Documents separate from documents used for construction. Record information concurrent with construction progress.
- 5.03 Legibly mark each item to record description of actual equipment and material installed actual construction on approved submittals, including the following:
 - A. Manufacturer's name and equipment and material model and number
 - B. Material and equipment substitutions or alternates utilized
 - C. Approved changes
 - D. Measured depths of foundations
 - E. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements
 - F. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work
 - G. Field changes of dimension and detail
 - H. Details not on original Contract Documents or Shop Drawings



- 5.04 As-Builts for Material and Equipment: 5 prints and electronic files in ".DWG" or "PDF" format. Indicate "As-Supplied" in revision block and sign. Show all changes and revisions to date of completion.
- 5.05 Conformed to Construction Record Drawings: 5 full size prints and electronic files in ".DWG" format. Indicate "Conformed by Contractor to Construction Records" in revision block and sign. Show all changes and revisions to date of completion.
- 5.06 Warranties: Submit duplicate notarized copies of warranty documents which are executed and transferable from Subcontractors, Suppliers, and manufacturers. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period. Assemble in three ring binders with durable plastic cover with a table of contents.
- 5.07 Operation and Maintenance Data
 - A. Submit data in ring binders with durable plastic covers with 8-1/2 by 11-inch text pages.
 - B. Cover: title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of Project, and subject matter of binder when multiple binders are required.
 - C. Subdivide binder contents with permanent page dividers, logically organized as described below with laminated plastic tabs and clearly printed the contents.
 - D. Prepare a Table of Contents for each volume, with material, equipment, or system description identified, in three parts as follows:
 - 1. Directory, listing names, addresses, and telephone numbers of Contractor, Subcontractors, and major equipment Suppliers.
 - Operation and maintenance instructions arranged by system and subdivided by Specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and Suppliers. Identify the following:
 - a. Significant design criteria
 - b. List of equipment
 - c. Parts list for each component
 - d. Operating instructions
 - e. Maintenance instructions for equipment and systems
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents
 - 3. Other Project documents and certificates, including the following:

- a. Shop Drawings and product data
- b. Certificates
- c. Photocopies of warranties
- E. Submit one draft copy of completed volumes 15 days prior to factory testing and 15 days prior to final inspection. Include 2 copies of completed manuals with major equipment when equipment is shipped. Draft copies will be reviewed and returned prior to factory testing and after final inspection, with Engineer's comments. Revise content of all sets as required prior to final submission. Submit 6 copies of revised final volumes within 10 days after final inspection.
- 5.08 Spare Parts and Maintenance Materials: Furnish spare parts, maintenance and extra materials in quantities specified. Deliver to Project Site and place in location as directed.



QUALITY REQUIREMENTS

ARTICLE 1—REFERENCE STANDARDS AND REGULATORY REQUIREMENTS

1.01 Reference to standards, specifications, manuals or codes of any technical society, organization or association, or Laws or Regulations of any governmental authority are used in accordance with Paragraph 3.02 of the General Conditions.

ARTICLE 2—QUALIFICATIONS

- 2.01 Meet or provide capability to meet the following criteria in connection with the Work of the Contract Documents.
 - A. Contractor's Experience and Qualifications Criteria
 - 1. Has performed similar work on at least 5 projects within the last 5 years for an electric utility.
 - 2. Has a full-time project manager in responsible charge of the work with at least 10 years' experience as project manager on comparable projects Manufacturer's field service engineers
 - B. Transportation and Handling
 - 1. Transport and handle material and equipment in accordance with manufacturer's instructions.
 - 2. Promptly inspect shipments to assure that material and equipment comply with requirements, quantities are correct, and material and equipment are undamaged.
 - 3. Furnish equipment and personnel to handle material and equipment by methods to prevent soiling, disfigurement, or damage.
 - 4. Uncrate equipment and dispose of packing material properly.

C. Storage and Protection

- 1. Store and protect material and equipment in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive material and equipment in weather-tight, climate controlled enclosures.
- 2. For exterior storage of fabricated material and equipment, place on sloped supports, above ground.
- 3. Provide for off-site storage and protection when site does not permit onsite storage or protection.



- 4. Cover material and equipment subject to deterioration with impervious sheet covering. Furnish ventilation to avoid condensation or potential degradation of material and equipment.
- 5. Furnish equipment and personnel to store material and equipment by methods to prevent soiling, disfigurement, or damage.
- 6. Arrange storage of material and equipment to permit access for inspection. Periodically inspect to assure material and equipment are undamaged and are maintained in acceptable conditions.
- After receipt of material and equipment, assume responsibility for loss and damage including but not limited to breakage, corrosion, weather damage, and distortion.
- 8. Notify Engineer and Owner in writing upon acceptance of a shipment.

2.02 QUALITY ASSURANCE AND CONTROL OF INSTALLATION

- A. Monitor quality control of Subcontractors, Suppliers, manufacturers, material, equipment, services, site conditions, and workmanship, to produce Work of specified quality. Conduct field quality control and testing requirements specified.
- B. Comply fully with manufacturers' installation instructions, including each step in sequence.
- C. If manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work using persons qualified to produce workmanship of specified quality.
- F. Secure material and equipment in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.



CLOSEOUT PROCEDURES

ARTICLE 1—SUBSTANTIAL COMPLETION

- 1.01 Substantial Completion shall mean when the Contractor has achieved completion of the following and met the requirements of Paragraph 15.03 of the General Conditions.
 - A. Final Testing has been successfully completed as set forth in the Testing and Startup Section.
 - B. A full inventory of the spare parts and special tools purchased by the Owner are replenished and in the custody of the Owner.
 - C. An inspection of the Facility is completed by the Engineer and the Owner.
 - D. An updated Punch List is provided.
 - E. A Certificate of Substantial Completion has been provided in accordance with paragraph 15.03 of the General Conditions.
- 1.02 The Owner and Engineer shall proceed in accordance with Article 15 of the General Conditions.
- 1.03 The Contractor shall have sole care, custody, and control of the Facility until achievement of Substantial Completion. During the one month period after Substantial Completion, Contractor shall be given limited access to correct items on the Punch List and achieve Final Completion.
- 1.04 The date of achieving Substantial Completion is defined as the date set forth in the Certificate of Substantial Completion that is accepted and signed by the Owner.

ARTICLE 2—FINAL COMPLETION

- 2.01 Final Completion shall be achieved when the Work is complete and following is achieved:
 - A. Substantial Completion has been achieved and Liquidated Damages for failure to meet Substantial Completion Date have been paid.
 - B. All Work including Punch List Items has been completed.
 - C. All Contractor equipment and supplies including waste materials have been removed from the Site.
 - D. Record Documents required by the Contract have been delivered.
 - E. Certificate of Occupancy or other permits to operate have been issued.
 - F. A request for final inspection in accordance with Paragraph 15.05 of the General Conditions has been submitted to the Engineer and the inspection has been completed and the results accepted by the Owner.



- G. A Final Application for Payment has been submitted to the Owner identifying total adjusted Contract Price, previous payments, and balance due, in accordance with Paragraph 15.06 of the General Conditions have been completed and provided to the Owner.
- 2.02 The Owner and Engineer shall proceed in accordance with Paragraphs 15.05 through 15.08
- 2.03 Owner shall make Final payment and acceptance in accordance with Paragraphs 15.05 C of the General Conditions.



TEMPORARY FACILITIES

ARTICLE 1—TEMPORARY UTILITIES

1.01 Electricity

- A. Furnish and pay for required power service from utility or source.
- B. Exercise measures to conserve energy.
- C. Power Service Characteristics: as required by Contractor and reasonably available from Owner.
- D. Furnish temporary electric service at location designated by Owner. Install pole of sufficient height to provide proper clearance and install weatherproof box of such size to house service disconnect, overcurrent protection, electric meter, etc.

1.02 Lighting

- A. Furnish and maintain lighting for construction operations and security.
- B. Furnish and maintain lighting to exterior staging and storage areas after dark for security purposes.
- C. Maintain lighting and provide routine repairs.
- 1.03 Heat: Furnish and pay for heat devices and heat as required to maintain specified conditions for construction operations.
- 1.04 Ventilation: Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- 1.05 Communications: Furnish, maintain and pay for telephone service to field office and Resident Project Representative field office at time of Project mobilization. Furnish, maintain, and pay for a dedicated telephone line for facsimile service. Provide for internet access via DSL, cable, satellite, or T1.
- 1.06 Water Service: Furnish, maintain and pay for suitable quality water service required.
- 1.07 Sanitary Facilities: Furnish and maintain required facilities and enclosures. Do not use existing facilities.

1.08 Fire Protection

- A. Provide temporary fire protection equipment and services during construction until the permanent system is serviceable per NEPA and Local Fire Code, and Fire Marshall requirements.
- B. Use only work procedures that minimize fire hazards to the extent practicable. Collect and remove combustible debris and waste materials from the site each day. Store fuels, solvents, and other volatile or flammable materials away from the construction and storage areas in well-marked, safe containers.



ARTICLE 2—CONSTRUCTION FACILITIES

2.01 Barriers

- A. Furnish barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Furnish barricades required by governing authorities for public rights-of-way.
- C. Provide protection for plant life designated to remain. Replace damaged plant life.
- D. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

2.02 Fencing

- A. Construction: Commercial grade chain link fence.
- B. Furnish 6 foot high fence around construction site; equip with vehicular gates with locks.

2.03 Protection of Installed Work

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Furnish temporary and removable protection for installed equipment and material. Control activity in immediate work area to minimize damage.
- C. Furnish protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

2.04 Security

- A. Provide security and facilities to protect Work and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

2.05 Access Roads

A. Construct and maintain temporary roads accessing public thoroughfares to serve construction area. Control dust and water.



- B. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic flow.
- C. Provide and maintain access to fire hydrants, free of obstructions.

2.06 Parking

- A. Construct temporary gravel surface parking areas to accommodate construction personnel.
- B. When site space is not adequate, provide additional off-site parking.
- C. Do not allow vehicle parking on existing pavement.
- D. Designate one parking space for the Resident Project Representative.

2.07 Progress Cleaning and Waste Removal

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from spaces and other closed or remote spaces before enclosing the space.
- C. Broom and vacuum clean interior areas before start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and rubbish from site weekly and dispose off-site.

2.08 Field Offices and Sheds

- A. Furnish weather tight office with lighting, electrical outlets, heating, cooling and ventilating equipment, and equip with furnishings and accessories to accommodate supervision of work, maintenance of records, and project meetings.
- B. Furnish separate office similarly equipped for use of Resident Project Representative.
- C. Locate offices and sheds a minimum distance of 20 feet from existing and new structures.

ARTICLE 3—TEMPORARY CONTROL

3.01 Water Control

- A. Grade site to drain. Maintain excavations free of water. Furnish, operate and maintain pumping equipment.
- B. Dewater and dispose of water in a manner that will not cause injury to public and private property.
- C. Protect site from puddling, ponding or running water.

3.02 Dust Control

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

3.03 Erosion and Sediment Control

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes and drains to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation. Promptly apply corrective measures.

3.04 Noise Control

A. Provide methods, means, and facilities to minimize noise from construction operations.

3.05 Pollution Control

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

B. Water Pollution Control

- 1. Assure that sediment, debris, petroleums, chemicals, or other contaminants will not enter existing drainage facilities and channels. Use construction methods that will prevent entrance of pollutants and wastes into existing streams, rivers, lakes, and flowing and dry watercourses.
- 2. Obtain legal disposal sites and dispose of pollutants and wastes in a legal manner.
- 3. Respond immediately to emergencies as directed when water quality of existing streams, rivers, lakes and flowing and dry watercourses is threatened. Take corrective action to remove or contain pollutants until a permanent solution is determined.

C. Air Pollution Control

1. Equipment and vehicles that exhibit excessive exhausts emissions due to poor engine adjustments or inefficient operation will not be permitted to operate until corrective repairs or adjustments are made.



2. Burning of materials from clearing or grubbing operations, combustible construction materials, and rubbish will not be allowed.

3.06 Traffic Regulations

- A. Control and maintain traffic within the project area. Coordinate traffic control plans with Owner and local agencies. Provide and maintain traffic control and maintenance devices, including, but not limited to, flag persons, advance warning sign barricades, traffic cones. Use of such control and maintenance devices shall be in accordance with the current edition of the "Manual on Uniform Traffic Control Devices for Street and Highways" as prepared by the National Joint Committee on Uniform Traffic Control Devices, and other applicable codes and standards.
- B. Operate devices 24 hours per day as required. Submit plan for traffic control to Owner for review 14 days in advance of any street closure or detour.
- C. Provide for access by emergency traffic, such as police, fire, and disaster units at all times. Contractor shall be liable for damages resulting from failure to provide such access.

ARTICLE 4—REMOVAL OF TEMPORARY UTILITIES, FACILITIES, AND CONTROLS

- 4.01 Remove temporary utilities, equipment, and facilities before Final Application for Payment inspection.
- 4.02 Remove temporary underground installations and grade site as indicated. Clean and repair damage caused by installation or use of temporary utilities, facilities, and controls.
- 4.03 Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

CAST-IN-PLACE CONCRETE

ARTICLE 1—REFERENCES

- 1.01 Use most recently adopted edition of standards and publications.
 - A. Specifications for Structural Concrete for Buildings (ACI 301) as supplemented and modified herein
 - B. Hot Weather Concreting
 - C. Cold Weather Concreting
 - D. Standard Practice for Curing Concrete (ACI 308)
 - E. Standard Practice for Selecting Proportions for Normal and Heavy-weight Concrete (ACI 211.1)
 - F. Manual of Standard Practice for Detailing Reinforced Concrete Structures (ACI)
 - G. Building Code Requirements for Structural Concrete (ACI 318)
 - H. Recommended Practice for Evaluation of Strength Test Results of Concrete (ACI 214)
 - I. Admixtures for Concrete and Guide for Use of Admixtures in Concrete (ACI 212.2)
 - J. ASTM A615 Deformed and Plain Billet Steel for Concrete Reinforcement
 - K. ASTM C33 Concrete Aggregates
 - L. ASTM C94 Ready-Mixed Concrete
 - M. ASTM C150 Portland Cement
 - N. ASTM C172 Standard Practice for Sampling Freshly Mixed Concrete
 - O. ASTM C260 Air Entraining Admixtures for Concrete
 - P. ASTM C295 Guide for Petrographic Examination of Aggregates for Concrete
 - Q. ASTM C309 Liquid Membrane Forming Compounds for Curing Concrete
 - R. ASTM C494 Chemical Admixtures for concrete
 - S. ASTM C586 Standard Test Method for Potential Alkali Reactivity of Carbonate Rocks for Concrete Aggregates (Rock Cylinder Method)
 - T. ASTM C1105 Standard Test Method for Length Change of Concrete due to Alkaline Carbonate Rock Reaction.
 - U. ASTM D2103 Polyethylene Film and Sheeting



1.02 All specifications, reports and recommendations referenced above are specifically incorporated herein. Where a conflict may occur between these Contract Documents and other referenced specifications, reports or recommendations, these Contract Documents shall govern.

ARTICLE 2—QUALITY ASSURANCE

- 2.01 Perform all work in accordance with ACI 301.
- 2.02 Perform all tests as specified in Contract Documents or as requested.
- 2.03 The Contractor shall be responsible for the testing of concrete by an independent testing firm, approved by the Owner. Tests will include slump and air testing in the field and preparation and storage of cylinders for compressive strength testing. Concrete cylinders shall be prepared from samples obtained at the point of truck discharge per ASTM 172. Three cylinders shall be prepared for each 30 cubic yards of concrete or portion thereof, placed in one day. Cylinders shall be prepared, cured and tested by the testing firm in accordance with ASTM C31 and ASTM C39. One cylinder shall be tested at seven days, one at 28 days, and one kept in reserve to be tested as directed by the Owner. These tests shall be at Contractor's expense.
- 2.04 Where the 28 day compressive strength of concrete in any test cylinder does not satisfy the requirements of Paragraph 2.04 of this Section, the Contractor shall be held responsible for additional tests and removal and replacement of unacceptable concrete work at no additional cost to the Owner.
- 2.05 Concrete not conforming to required elevations, tolerances, or not properly placed or not of the specified type and quality shall be corrected or replaced at Contractor's expense.
- 2.06 Concrete mix design:
 - A. Concrete mix proportions and strength test results shall either be prepared by a testing agency, paid by the Contractor and approved by the Owner, or be based upon the test results of a similar mix made in the last 120 days and certified by the Contractor. Mixes shall be made using aggregates proposed to be used for the structure. Compression test cylinders made from concrete mixes using the coarse aggregates specified shall be tested for each size of coarse aggregate specified and used. Test cylinder ages shall be 7, 14 and 28 days for each size of coarse aggregate specified. The Contractor shall certify compliance with sieve analyses for the aggregates used. Tests shall be performed in accordance with ASTM Tests C31, C39, C143, C172 and C173 as applicable. Tests, if required, will be at Contractor's expense.
- 2.07 Test results of aggregates to be used for concrete shall either be prepared be a testing agency, paid by the Contractor and approved by the Owner, or based upon the test results of the same material source made in the mast 120 days and certified by the Contractor. Tests shall, at minimum, include ASTM C295. If petrographic

examination does not determine conclusively that the aggregate is not reactive, then samples should be tested per ASTM C586 and concrete tests in 2.06 A, above, shall also include ASTM C1105. The Contractor shall certify that the aggregates to be used are not reactive. Tests, if required, will be at Contractor's expense.

ARTICLE 3—SUBMITTALS

- 3.01 Submit concrete mix designs (proportions) and strength test results in accordance with the General and Special Conditions and as specified in 2.06 A above.
- 3.02 Submit results of petrographic examination of aggregates as specified in 2.07 above.
- 3.03 Submit, when requested, Shop Drawings for review in accordance with Submittals Section
- 3.04 The Shop Drawings shall show complete details and arrangement of reinforcing steel with added details of Contractor's method to prevent misalignment, warping or damage to the reinforcing bar cage while being transported, raised and positioned in the excavated shaft.
- 3.05 Obtain batch tickets from the concrete manufacturer, properly completed and issued to the purchaser, in compliance with ASTM C94 for each load of concrete before unloading at the site. Submit one copy to Owner and one copy to Engineer.
- 3.06 Submit manufacturer's literature, specifications and installation instructions for each item of proprietary material used (admixtures, etc.).
- 3.07 Submit one copy of test reports to Owner and one copy to the Engineer within three days after the completion of individual tests.

ARTICLE 4—FORM MATERIALS

4.01 Forms may be of \(^{5}\)k inch or \(^{3}\)4 inch structural plywood, or steel forms with steel or wood facing, or approved equal

ARTICLE 5—REINFORCING STEEL

5.01 Reinforcing bars shall be deformed steel bars conforming to the requirements of ASTM A615, Grade 60, having a minimum yield of 60,000 psi. Reinforcing bars will be clean and free of loose rust and/or any substance that would hinder bond strength.

ARTICLE 6—CONCRETE MATERIALS

6.01 All concrete shall be plant mix and delivered in accordance with Standard Specifications for Ready Mixed Concrete, ASTM C94. Mixing time in ASTM specification shall be observed. Concrete shall be composed of Portland cement, air



- entraining agent (if used), fine aggregate, coarse aggregate and water. Materials from the same source from start to finish of the job shall be used.
- 6.02 Portland cement shall conform to ASTM C150, Type I or II. Only one brand of cement shall be used.

6.03 Aggregates:

- A. Fine aggregates shall conform to the requirements of ASTM C33, except that the first sentence of Paragraph 4.1 shall be changed to read, "Fine aggregate shall be graded within the following limits," and Paragraph 4.2 shall be deleted in its entirety.
- B. Coarse aggregate shall conform to the requirements of ASTM C33, Table 2. Coarse aggregate shall be as specified on Contract Drawings.
- C. Use only aggregates with good service records for producing durable, long-life concrete.
- 6.04 Water: Mixing water for concrete shall be fresh, clean and potable.

6.05 Admixtures:

- A. Air entraining agent and mid-range water reducer are the only admixtures permitted. If used, they shall be stored in such a manner as to avoid contamination and damage. It shall be protected from freezing and other temperature changes which would adversely affect its characteristics. Only one brand of air entraining agent shall be used.
- B. Calcium chloride and other chlorides shall not be used under any circumstances.
- C. Air entraining agent shall conform to the requirements of ASTM C260 and shall not contain chlorides. The air entraining agent shall be Master Builders' MBVR, or approved equal. Air entraining agent shall be in solution and introduced into the concrete mix by dispenser. The amount of air entraining agent used shall be based upon consultation with a field representative trained by the manufacturer of the product. Tests for air content shall be made in accordance with ASTM C231.
- D. Mid-range water reducing agent shall conform to the requirements of ASTM C494 Type A and shall not contain chlorides. The water reducing agent shall be introduced at the batch plant. The amount of water reducing agent used shall be based on the approved mix design.

- 6.06 Curing compound may be used if approved, subject to the requirements of this Section. The compound shall be SONOSIL, by Sonneborn Building Products Company, or approved equal.
- 6.07 Form release agent shall be Nox-Crete, or approved equal.

ARTICLE 7—CONCRETE MIX

- 7.01 The concrete mix shall conform to "Recommended Practice for Selecting Proportions for Normal and Heavy-weight Concrete" (ACI 211.1), less Appendices 1, 2, and 4 and ASTM C 94, Ready-Mix-Concrete. Aggregates shall be normal weight. The water cement ratio shall not exceed 0.45 for any condition or use.
- 7.02 Minimum ultimate compressive strength shall be 4,000 psi at 28-day age. Compressive strength shall be determined by testing on standard 6-inch by 12-inch cylinders tested in accordance with ASTM C39.
- 7.03 Slump shall be maximum 3-inches for spread foundations and maximum 7-inches for drilled piers.
- 7.04 Entrained air content shall be $5\frac{1}{2}$ -percent within the limits of +/-1-percent.

ARTICLE 8—CURING MATERIALS

- 8.01 Water: clean and drinkable
- 8.02 Membrane curing compound: ASTM C309 or FS TT-C-800
- 8.03 Polyethylene Film: ASTM D2103 0.15 mm thick, clear color

ARTICLE 9—FOUNDATION BASE MATERIAL

- 9.01 Where indicated for foundations on contract drawings:
 - A. Vapor Barrier: 6 mil polyethylene
 - B. Crushed Stone: Crusher Run Limestone.

ARTICLE 10—GENERAL EXECUTION

- 10.01 Perform all concrete work as specified on Contract Drawings and in Contract Specifications, and in accordance with the requirements of ACI 301.
- 10.02 The condition of all foundation excavations and of the pier excavation, above-ground formwork, in-place reinforcing steel and embedded items (e.g., anchor bolts or anchor bolt cage) are subject to field review by the Owner prior to placing of concrete. The requirements of the Contract Drawings govern over any Shop



- Drawings used in placement thereof. Concrete shall not be placed until reinforcing steel and embedded items have been reviewed by Owner.
- 10.03 Foundation excavations and drilled pier shafts shall not be left open overnight. Concrete shall be poured immediately after excavation is ready and reinforcement and anchor bolts are set.

10.04 Preparation:

- A. Precautionary plans shall be submitted for hot and cold weather concreting for review at the same time the reinforcing placement Shop Drawings are submitted.
- B. Precautionary plans shall be submitted for meeting unexpected water problems and/or unexpected soil caving problems at the same time the reinforcing placement Shop Drawings are submitted.
- C. Verify that positioning of reinforcement and orientation of anchor bolts (anchor bolt cage) are accurately placed and securely held in position, as shown on the Contract Drawings, and that they will not be displaced during concrete pouring.

ARTICLE 11—FORMWORK

- 11.01 Verify lines and levels before proceeding with formwork.
- 11.02 Hand trim sides and bottoms of earth forms; remove debris, loose and wet soil.
- 11.03 Tolerances shall be as specified in Table 4.3.1 of ACI 301.
- 11.04 Formwork shall be properly oiled or coated with a form release agent prior to the pouring of the revealed above-ground level portion of the pier.
- 11.05 Formwork shall be removed in accordance with the recommendations of ACI 305R and ACI 306R.

ARTICLE 12—REINFORCING STEEL AND EMBEDDED ITEMS

- 12.01 Reinforcing steel will be placed and held securely in place as shown on the Contract Drawings.
- 12.02 Welding, hot bending and re-bending of reinforcing bars are not permitted.
- 12.03 Splices of reinforcing steel shall be avoided. If unavoidable, lap splices shall be as per ACI 318 Sections 12.14 and 12.15.
- 12.04 Items to be embedded (e.g., anchor bolts) in concrete shall be placed accurately and held in the correct position while the concrete is placed. The surfaces of metalwork in contact with or embedded in concrete shall be cleaned of all rust, dirt, grease, loose scale, grout, mortar and other foreign matter. After anchor bolts (or anchor bolt cage) have been embedded and caisson surface finished, the threads on anchor bolts will be thoroughly cleaned of all concrete, and shall be protected by grease,

and by having the nuts screwed on or by other acceptable means until the time of installation of the pole or metalwork.

ARTICLE 13—PLACING CONCRETE

- 13.01 All foundations shall be poured to grade and troweled. Edges shall be finished. No grout caps shall be used under baseplates.
- 13.02 Contractor shall notify the Owner a minimum of 24 hours prior to commencement of placing the concrete.
- 13.03 No admixtures shall be allowed to be added to the concrete at the job site.
- 13.04 Placing of concrete under water shall not be permitted.
- 13.05 Concrete shall be placed in such a manner that the concrete does not strike against the reinforcing bars or the anchor bolts (anchor bolt cage).
- 13.06 Concrete shall be placed in one pour and without joints.
- 13.07 Spread foundations and the top 10' of the pier foundations will be vibrated. No vibrator shall be raised a rate faster than one inch per second. A spare vibrator in operating condition shall be on-site.
- 13.08 During hot weather, concrete work shall be performed in accordance with ACI 305R. Hot weather shall not be based on air temperature alone. The Contractor shall take into consideration the air temperature, relative humidity, wind velocity, temperature of the ingredients to be used for producing the concrete to determine the precautions the Contractor shall take during the production, transportation, handling, placing, finishing and curing of the concrete.
- 13.09 During cold weather, concrete work shall be performed in accordance with ACI 306R. Cold weather is considered to occur when the air temperature of the surrounding air is expected to be below 40 degrees Fahrenheit during placing or within 24 hours thereafter. The Contractor shall provide temporary housing over all concrete work. Temporary housing enclosures shall be maintained and heated to a minimum temperature of 50 degrees Fahrenheit for six full days.

ARTICLE 14—FINISHING

- 14.01 All exposed form concrete shall be smooth form finish as defined by ACI 301 and ACI 308, Standard Practice for Curing Concrete.
- 14.02 Chamfer exposed edges as shown on the Contract Drawings.

ARTICLE 15—MONOLITHIC SLAB FINISHES

- 15.01 Apply float finish to monolithic slab surfaces to receive trowel finish and other finishes as hereinafter specified.
 - A. After screeding, consolidating, and leveling concrete slabs, do not work surface until ready for floating. Begin floating, using float blades or float shoes only, when surface water has disappeared, when concrete has stiffened



sufficiently to permit operation of power-driven floats, or both. Consolidate surface with power-driven floats or by hand-floating if area is small or inaccessible to power units. Check and level surface plane. Cut down high spots and fill low spots. Uniformly slope surfaces to drains. Immediately after leveling, refloat surface to a uniform, smooth, granular texture.

- 15.02 Apply trowel finish to monolithic slab surfaces to be exposed to view.
 - A. After floating, begin first trowel finish operation using a power-driven trowel. Begin final troweling when surface produces a ringing sound as trowel is moved over surface. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance, and with surface leveled.
- 15.03 Apply nonslip broom finish to exterior concrete paving, approach slabs, platforms, ramps, and horizontal surfaces of foundations except drilled piers.
 - A. Immediately after float finishing, slightly roughen concrete surface by brooming with fiber-bristle broom perpendicular to main traffic route.

ARTICLE 16—PLACING ANCHOR BOLTS

- 16.01 Anchor bolts shall be set by clamping in a template conforming to the anchor bolt pattern and orientation. Template shall remain in place until concrete has hardened.
- 16.02 Contractor shall supply required templates, clamps, and accessories.
- 16.03 The surfaces of metal work in contact with or embedded in concrete shall be cleaned of all rust dirt, grease, loose scale, grout, mortar and other foreign matter.
- 16.04 Do not weld anchor bolts.
- 16.05 Threads on anchor bolts will be thoroughly cleaned of all concrete after concrete is poured. Threads will then be protected by application of grease.

ARTICLE 17—CURING

17.01 All concrete shall be cured continuously in accordance with ACI 301 and ACI 308, Standard Practice for Curing Concrete for at least seven days immediately after completion of placement and finishing. Curing time and procedures shall be adjusted to suit hot and cold weather conditions. Curing shall be initiated as soon

as the concrete is finished. Curing water shall not be excessively cooler than the concrete. All concrete cast in hot weather shall have an initial moist cure.

ARTICLE 18—PATCHING

18.01 Any surface defects larger than ³/₄-inch in the longest dimension shall be repaired by sacking or rubbing after filling the defective area with matching grout.

ARTICLE 19—HOT WEATHER CONCRETING

19.01 Concrete operations performed in hot weather conditions will be accomplished in strict accordance with ACI 305.

ARTICLE 20—COLD WEATHER CONCRETING

20.01 Concrete operations performed in cold weather conditions will be accomplished in strict accordance with ACI 306.

ARTICLE 21—PROTECTION

21.01 Immediately after placement, Contractor shall protect finished concrete from premature drying, hot or cold temperatures, and mechanical injury. The concrete will be maintained with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.



JOINT PROTECTION

ARTICLE 1—SEALANTS

1.01 Polyurethane Sealant: Single component, chemical curing, non-staining, non-bleeding, non-sagging type; as manufactured by Bostik Construction Products, with the following properties:

Joint Movement: 25-percent

Service Temperature Range: -200° to 1500°F

Shore A Hardness: 40 to 50

Joint Sealer: Swell Seal, combiseal type, as manufactured by DeNeef America,

Inc., St. Louis, MO

ARTICLE 2—ACCESSORIES

2.01 Primer: Non-staining type, recommended by sealant manufacturer to suit application

ARTICLE 3—EXAMINATION

- 3.01 Verify that surfaces are ready to receive work.
- 3.02 Beginning of installation means installer acceptance of existing surfaces

ARTICLE 4—PREPARATION

- 4.01 Clean and prime joints in accordance with manufacturer's instructions.
- 4.02 Remove loose materials and foreign matter that will impair adhesion of sealant.
- 4.03 Protect adjacent work from damage and disfiguration.

ARTICLE 5—INSTALLATION

- 5.01 Install sealants in accordance with sealant manufacturer's instructions.
- 5.02 Apply sealants within temperature ranges recommended by sealant manufacturer.
- 5.03 Install sealant free of air pockets, foreign embedded matter, ridges and sags.

ARTICLE 6—CLEANING, REPAIRING AND PROTECTING

- 6.01 Clean adjacent soiled surfaces.
- 6.02 Repair or replace damaged adjacent finishes caused by sealing operations.

 Protect sealants until cured.



DRILLED CONCRETE PIERS AND SHAFTS

ARTICLE 1—REFERENCES

- 1.01 Standard Specification for the Construction of End Bearing Drilled Piers ACI 336.1-01
- 1.02 ACI 318.11, Building Code Requirements for Structural Concrete
- 1.03 Drilled Shafts: Construction procedures and design methods. ADSC:The International Association of Foundation Drilling

ARTICLE 2—QUALITY ASSURANCE

- 2.01 Perform work in accordance with Drilled Shafts.
- 2.02 During construction, the Contractor will maintain a field record (to be given upon completion of construction to the Engineer) of any caving of materials, trickling of water, water table, or any unusual condition giving location and action taken.

ARTICLE 3—SHAFT LINERS

- 3.01 Shaft liners, if required, shall consist of straight steel pipe conforming to ASTM A252, grade 2, of diameters and weight per linear foot to properly retain walls for the required operation. Splicing or butting of shaft liners shall be avoided by using maximum lengths for individual steel liner pieces.
- 3.02 Drilling mud or slurry, if wet-hole construction is used, will be pre-mixed prior to placing in the hole. Density of the slurry shall be 65-85 pcf as determined by a representative sample at the time concrete is placed.

ARTICLE 4—INSTALLATION PROCEEDURES

- 4.01 Perform all work as specified in Contract Drawings and in Contract Documents.
- 4.02 Ensure pier shafts are drilled vertically with allowed deviation from true vertical alignment of no more than two percent of pier length, and not more than one inch off center from true location. Ensure pier shafts are of the diameters and depths indicated on Contract Drawings.
- 4.03 Ensure elevation of top of pier and of top of anchor bolts, and that orientation of anchor bolts are as specified in contract drawings.
- 4.04 Provide a suitable method of holding reinforcing steel specified in position. Reinforcement shall be placed as per Contract Drawing. Splices of reinforcing steel shall be avoided. If unavoidable, lap splices shall be as per ACI 318 Sections 12.14, 12.15 Welded splices shall be avoided. Handling and placement of reinforcing bar



- cage will be accomplished in such manner to maintain circular shape and to prevent permanent buckling.
- 4.05 Piers shall be poured to grade and troweled to shed water. Top of piers shall be bevel edged to prevent chipping. Grout shall not be used under baseplates, but shims up to 0.25 inch will be permitted.
- 4.06 Report immediately to Engineer any unusual or unexpected conditions encountered during any of the construction procedures.
- 4.07 Remove shaft liners if used. Unexpected conditions dictating that liners be left in place must be reported to the Engineer. Leaving liners in place must be previously approved by the Engineer. Removal shall begin less than 60 minutes after pouring has started, and shall continue as appropriate thereafter, as the pour continues.
- 4.08 Immediately after drilling and placing shaft liners (if required):
 - A. Clean pier bases of loose material, position reinforcing steel, anchor bolts or anchor bolt cage as specified in Contract Drawings, and place concrete to include formwork and concrete placement above ground level. These operations shall be performed on the same day for each pier. Shafts will not be left open overnight.
 - B. Pour concrete monolithically and in such manner that it does not strike the reinforcement nor the anchor bolts (or anchor bolt cage), and in such a manner as to not disturb the position of the reinforcement of the anchor bolts (or anchor bolt cage). Concrete may be placed in lower portion of shaft before anchor bolts (or cage) are positioned. In this case, however, anchor bolts (or cage) must be positioned before concrete pier reaches an elevation no less than 12-inches below the bottom of anchor bolts (or cage).

4.09 Shaft Liners:

- A. Temporary steel shaft liners shall be used. Shaft liners shall be of sufficient strength and rigidity to withstand all installation stresses, and to prevent collapse due to soil or hydrostatic pressure.
- B. Shaft liners shall fit snugly in the shaft without voids between the liner and the laterally supporting soil.
- C. A shaft liner should be driven (pounded) such that it penetrates equally, rather than crooked.
- D. After the shaft liner is in place, the shaft liner and hole shall be cleared of water, sediment, and debris prior to pouring concrete.

CRUSHED STONE SURFACING

ARTICLE 1—QUALITY ASSURANCE

- 1.01 Provide copies of all material gradations and test reports of stone material (before finalization of any agreements with supplier), and any compaction work for review and acceptance by the Owner.
- 1.02 Coordinate surfacing operations with the Owner and Engineer. Inform both parties when unanticipated conditions are encountered, do not proceed with Work until resolution is provided in writing.
- 1.03 Retain services of individual experienced in land surveying to confirm lines, grades and final elevations of Work as installed. Supply results of survey with written confirmation to Owner upon request.

ARTICLE 2—REFERENCES

2.01 Codes and standards referred to in the text of this document.

ARTICLE 3—SUBMITTALS

- 3.01 Gradations of surface materials.
- 3.02 Results of Compaction Tests performed on site.

ARTICLE 4—SURFACING MATERIAL

- 4.01 Material obtained off site at Contractor's expense from an approved source of materials and containing no topsoil, silt, or potentially swelling clay, organic material, trash, lumber and sticks.
- 4.02 Provide adequate material to not only install to required minimum depth, but also to meet lines and grades shown on drawings, PLUS minimum surfacing depth. Contractor shall provide adequate material to fill in low spots and ruts on site with



- surfacing material, such that site is of a uniform surface and slope over the entire area.
- 4.03 Crushed stone surface for substation yard shall be No. 57 crushed stone per ASTM D 448.
- 4.04 Crushed stone surface for driveway shall be No. 57 crushed stone per ASTM D 448.

ARTICLE 5—WEED CONTROL CHEMICALS

- 5.01 Provide and apply weed control chemicals for treatment of entire substation area before installation of stone surfacing. Monitor progress during construction to ensure satisfactory results and repeat as necessary.
- 5.02 Weed control chemicals shall be a pre- and post-emergence type from the approved list below:
 - A. Product Manufacturer
 - B. Sahara American Cyanamid Company
 - C. Escort DuPont
 - D. Accord Monsanto
 - E. Spike Dow Elanco
 - F. Tordon Dow Elanco

ARTICLE 6—INSTALLATION OF SURFACING MATERIALS

- 6.01 Do not install stone surfacing until site has been proof-rolled, and acceptable compaction has been achieved.
- 6.02 Prior to the installation of stone surfacing, weed control chemicals shall be sprayed.
- 6.03 Perform installation of stone surfacing for substation yard as last Contractual Activity, but before energizing substation.
- 6.04 Place surfacing materials on site to the limits indicated on the drawings.
- 6.05 Adjust moisture and compact in place to a minimum compaction level of 95-percent of ASTM D1557.
- 6.06 Maintain accessibility and maneuverability to energized equipment by placing necessary stone and repair of grade.

EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE CERTIFICATE

A. Has your company filed the required Employer Information Report, EEO-1 (Standard Form 100) with the Secretary of Labor's Joint Reporting Committee for the prior period ending March 31?

YES NO

If your answer to Question A above is "NO", check the following appropriate reasons for not filing:

- 1. Employ less than one hundred people company-wide.
- 2. Have specific exemption from Secretary of Labor as provided in Section 20 of Executive Order 11246, as amended.

Within Thirty (30) days after receipt of any order from the **Frankfort Electric and Water Plant Board** and prior to each March 31 thereafter, during the performance of work under said order, the undersigned firm agrees to file Standard Form 100, entitled "Equal Employment Opportunity Information Report EEO-1" in accordance with instructions contained therein, unless such firm has either filed such report within twelve months preceding the date of the award or is not otherwise required by law or regulations to file such a report.

B. In consideration of the undersigned being placed in the **Frankfort Electric and Water Plant Board's** "Supplier Document" for the year ending March 31 next, the undersigned certifies that he <u>does not</u> and <u>will not</u> maintain or provide for his employees any segregated facilities at any of his establishments and that he does not and will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The undersigned agrees that a breach of this certification is a violation of the Equal Opportunity Clause in any subcontract, contract, purchase order, or agreement that the undersigned may receive from the **Frankfort Electric and Water Plant Board.**

As used in this certification, the term "Segregated facilities" means any waiting room, work areas, rest room, and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, creed, color or national origin, because of habit, local custom or otherwise.

The undersigned further agrees that he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that he will retain such certification in his files and that he will forward the following notice to his proposed subcontractors (except when the proposed subcontractors have submitted identical certification for specific time periods).

"NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATION OF NONSEGREGATED FACILITIES"

"A certification of Nonsegregated Facilities, as required by the May 9, 1967 order on Elimination of Segregated Facilities, by the Secretary of Labor (32 Fed. Reg. 7439, May 19, 1967) must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the

provisions of the Equal Opportunity clause. The certification for all subcontractors during a period (i.e., quarterly, semi-annually, or annually).

(Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.)"

C. Do you have at each of your facilities a current written Affirmative Action Compliance Program as required by Title 41 of the Code of Federal Regulations (CFR) 60-1.40; and current written Affirmative Action Programs for disabled veteran, veterans of the Vietnam Era and Handicapped workers as required by CFR 60-250.4 and CFR 60-741.4?

YES NO

If "NO" within 120 days after receipt of any order resulting from attached quotation, the undersigned firm agrees to develop and maintain written Affirmative Action Compliance Programs as required. (Current law requires the contractor to develop a written Affirmative Action Compliance Programs in those cases where the contractor has received prime contract or subcontracts for \$50,000 or more and employs fifty (50) or more people).

CONTRACTOR (SELLER/SUPPLIER):
MAILING ADDRESS / PHONE:
Authorized Representative's NAME (PRINT OR TYPE):
Authorized Representative TITLE:
Dated Signature of Authorized Representative:

"NOTICE TO PROSPECTIVE CONTRACTORS OF REQUIREMENT OF GENERAL SAFETY PROGRAM"

The Frankfort Plant Board requires that all contractors operate in compliance with standards set forth by federal, state, and local regulatory agencies, including but not limited to the Occupational Safety and Health Administration, Environmental Protection Agency and Department of Transportation. To comply with the regulations set forth by these agencies it is necessary for each contractor to operate under an established safety program pertaining to the contractor's specific line of business.

The primary goal of a safety program is to protect the health and safety of employees and the public. Our goals are also to conserve and protect property and the environment. **IT IS OUR ABSOLUTE CONVICTION THAT:**

- This is a moral responsibility of each firm and worker involved.
- Safe and healthful work is more efficient, effective and inseparable from how we perform our work.
- Accidents and injuries are unnecessary costs

We accomplish work which is free from accident and injury by providing vigorous leadership that is visible through the organization.

How well we conduct our work in a hazard-free manner, according to the direction provided, is a key factor in our performance for which we are each accountable.

There are certain basic elements that are incorporated into the safety program:

- Effective management leadership from each contractor;
- Organization of a General Safety Program;
- On-site supervisor with authority to carry out their responsibilities including suspension of work to correct unsafe conditions;
- Proper training and supervision; and
- Employee participation

Does your organization operate under an established safety program that is in compliance with all applicable federal, state and local regulations and does this program embody the philosophies described above?

YES		NO		
CONTRACTOR (SELLER/SUPF	PLIER):			
MAILING ADDRESS / PHONE:				
Authorized Representative's NAME (PRINT OR TYPE):				
Authorized Representative TITLE:				
Dated Signature of Authorized Representative:				
The state of the s				

Frankfort Electric and Water Plant Board PO Box 308, Frankfort KY 40602

DRUGFREE WORKPLACE COMPLIANCE CERTIFICATE

PLEASE SIGN BELOW TO INDICATE: 1) Contractor is in compliance with any applicable local, state or federal laws concerning mandatory Drug and Alcohol Testing Programs; and 2) AS a term of any contract, the Contractor agrees to comply with any such drug and/or alcohol testing that may be required by law.

CONTRACTOR : MAILING ADDRESS/PHONE:	
	
Authorized Representative's	
NAME (Print or Type):	
Authorized Representative's TITLE:	
SIGNATURE & DATE:	