CITY OF LOCKPORT

14TH STREET TO 18TH STREET
WATER MAIN AND ROAD
RECONSTRUCTION IMPROVEMENTS

CHAMLIN PROJECT NO. 66284.00

DECEMBER 2019

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INVITATION TO BID

Sealed Bids will be received by the City of Lockport for “14th Street to 18th Street Water Main and Road Reconstruction Improvements” and is further described as follows: watermain replacement, removal and replacement of concrete curb and gutter, pavement removal, hot mix asphalt paving, driveway removal and replacement, sidewalk removal and replacement, restoration, and related work.

Bids shall be submitted no later than 1:00 PM at the office of the City Clerk, at Lockport City Hall, 222 E. Ninth Street, Lockport, Illinois 60441 on Thursday, December 19, 2019. Proposals will be opened and publicly read at that time.

Plans and specifications may be accessed on-line at: www.chamlin.com

Full-size plans and specifications are available from Chamlin & Associates, Inc., 221 West Washington Street, Morris, Illinois 60450 at the non-refundable cost of $50.00 per set.

Bidders are advised that this Contract will be subject to the Illinois Prevailing Wage Act.

The Bid shall be accompanied by a bid bond in the amount of five percent (5%) of the gross amount of the bid.

A Pre-Bid Meeting has been scheduled for Thursday, December 12, 2019 at 10:00 AM at the City of Lockport Public Works Department at 17112 South Prime Boulevard, Lockport, Illinois 60441.

Bids may be held by the City of Lockport for a period not to exceed 30 days from the date of the opening of Bids for the purpose of reviewing the Bids and investigating the qualifications of Bidders, prior to awarding of the Contract.

The Owner reserves the right to accept or reject any or all Bids and to waive any informalities in the bidding.

BY ORDER OF:

MAYOR AND CITY COUNCIL
LOCKPORT, ILLINOIS
# INSTRUCTIONS TO BIDDERS

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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.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder’s qualifications to perform the Work, Bidder shall submit with its Bid (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, as shown on the Statement of Bidder’s Qualifications, if included in the Bidding Documents, and (b) the following additional information:

A. [Evidence of Bidder’s authority to do business in the state where the Project is located.]

B. [Bidder’s state or other contractor license number, if applicable.]

C. [Subcontractor and Supplier qualification information, coordinate with provisions of Article 12 of these Instructions, “Subcontractors, Suppliers, and Others.”]

D. [Other required information regarding qualifications]

3.02 A Bidder’s failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder’s qualifications.

3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder’s representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER’S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 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.
4.02 Existing Site Conditions

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The Supplementary Conditions Specification sections may identify:
   a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
   b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
   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 Specification sections do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

4. Geotechnical Baseline Report: The Bidding Documents may contain a Geotechnical Baseline Report (GBR), if available. The GBR describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations (“Baseline Conditions”). The GBR is a Contract Document.

The Baseline Conditions in the GBR are intended to reduce uncertainty and the degree of contingency in submitted Bids. However, Bidders cannot rely solely on the Baseline Conditions. Bids should be based on a comprehensive approach that includes an independent review and analysis of the GBR, all other Contract Documents, Technical Data, other available information, and observable surface conditions. Not all potential subsurface conditions are baselined.

Nothing in the GBR is intended to relieve Bidders of the responsibility to make their own determinations regarding construction costs, bidding strategies, and Bid prices, nor of the responsibility to select and be responsible for the means, methods, techniques, sequences, and procedures of construction, and for safety precautions and programs incident thereto.

B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or adjacent to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05.
of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 Site Visit and Testing by Bidders

A. Bidder shall conduct the required any Site visit during normal working hours, and shall not disturb any ongoing operations at the Site. **Bidder shall contact the Engineer for contact information to arrange for any Site visit.**

B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.

C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner’s authority regarding the Site.

D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 Owner’s Safety Program

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

4.05 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 5 – BIDDER’S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;

D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions Specification sections, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;

E. consider 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 Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs;

F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;

G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;

H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;

I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and

J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.01 A pre-Bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Attendance may be mandatory and will be indicated as such in the invitation or advertisement to bid. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.
ARTICLE 7 – INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

8.01 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 certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions. Bidder may use Bid bond form from surety unless provided in the Bid Package. If certified checks or bank money orders are not to be allowed, it shall be noted in the advertisement or invitation for bid.

8.02 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 Documents, 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 Documents 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. Such forfeiture shall be Owner’s exclusive remedy if Bidder defaults.

8.03 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 seven 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.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed, and completed and ready for final payment, are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

10.01 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 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those “or-equal” or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an “or-equal” or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

11.02 All prices that Bidder sets forth in its Bid shall 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 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.

12.03 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for the following portions of the Work to perform work, if requested by the Owner or Engineer. If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall 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.

12.04 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, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity 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 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents.
   A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall 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.”

13.02 A Bid by a corporation shall 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 shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.

13.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The partnership’s address for receiving notices shall be shown.

13.04 A Bid by a limited liability company shall 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 firm’s address for receiving notices shall be shown.

13.05 A Bid by an individual shall show the Bidder’s name and address for receiving notices.

13.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture’s address for receiving notices shall be shown.

13.07 All names shall be printed in ink below the signatures.

13.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

13.10 The Bid shall contain evidence of Bidder’s authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder’s state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

14.01 Lump Sum
   A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

   [or]
14.01 Base Bid with Alternates
   A. Bidders shall submit a Bid on a lump sum basis for the base Bid and include a separate price for each alternate described in the Bidding Documents and as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate.
   B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form.

14.02 Unit Price
   A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
   B. The “Bid Price” (sometimes referred to as the extended price) for each unit price Bid item will be the product of the “Estimated Quantity” (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding “Bid Unit Price” offered by the Bidder. The total of all unit price Bid items will be the sum of these “Bid Prices”; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
   C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.03 Allowances
   A. For cash allowances the Bid price shall 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 13.02.B of the General Conditions.

14.04 Price-Plus-Time Bids
   A. The Owner will consider the time of Substantial Completion commitment made by the Bidder in the comparison of Bids.
   B. Bidder shall designate the number of days required to achieve Substantial Completion of the Work and enter that number in the Bid Form as the total number of calendar days to substantially complete the Work.
   C. The total number of calendar days for Substantial Completion designated by Bidder shall be less than or equal to a maximum of [____], but not less than the minimum of [____]. If Bidder purports to designate a time for Substantial Completion that is less than the allowed minimum, or greater than the allowed maximum, Owner will reject the Bid as nonresponsive.
   D. The Agreement as executed will contain the Substantial Completion time designated in Successful Bidder’s Bid, and the Contractor will be assessed liquidated damages at the rate stated in the Agreement for failure to attain Substantial Completion within that time.
   E. [Bidder shall also designate the time in which it will achieve Milestones, and achieve readiness for final payment. Such time commitments shall be consistent with the “Time of Substantial Completion” to which Bidder commits. The Agreement as executed will contain, as binding Contract Times, Successful Bidder’s time commitments regarding Milestones, as applicable, and readiness for final payment.]
ARTICLE 15 – SUBMITTAL OF BID

15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.

15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall 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 shall 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 shall be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” A mailed Bid shall be addressed to [______]. When using mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the place and prior to the time indicated in the advertisement or invitation for bid. If a Bid is to be delivered by mail or other delivery system, Bidder is advised to contact the Owner to confirm physical delivery address and availability for delivery. The Engineer will not accept Bids for delivery to the Bid opening.

15.03 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 16 – MODIFICATION AND WITHDRAWAL OF BID

16.01 A 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.

16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.

16.03 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, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work. This provision to withdraw a Bid without forfeiting the Bid security does not apply to Bidder’s errors in judgment in preparing a Bid.

ARTICLE 17 – OPENING OF BIDS

17.01 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. If Bids are to be opened privately, it shall be indicated in the advertisement or invitation to bid.
ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 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 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. 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, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid. Owner may have adopted a Responsible Bidder Ordinance or Resolution, as described in the Supplementary Conditions.

19.03 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items. Any other method of determining apparent low Bidder will be as described on the Bid form.

C. Bid prices will be compared after adjusting for differences in time of Substantial Completion (total number of calendar days to substantially complete the Work) designated by Bidders. The adjusting amount will be determined at the rate set forth in the Agreement for liquidated damages for failing to achieve Substantial Completion, or such other amount that Owner has designated in the Bid Form.

1. The method for calculating the lowest bid for comparison will be the summation of the Bid price shown in the Bid Form plus the product of the Bidder-specified time of Substantial Completion (in calendar days) times the rate for liquidated damages [or other Owner-designated daily rate] (in dollars per day).

2. This procedure is only used to determine the lowest bid for comparison and contractor selection purposes. The Contract Price for compensation and payment purposes remains the Bid price shown in the Bid Form.

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.
ARTICLE 20 – BONDS AND INSURANCE

20.01 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 and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall 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 shall 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 ten days thereafter, Owner shall deliver one fully executed counterpart of the 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 22 – SALES AND USE TAXES

22.01 Owner (if municipal or government agency) is exempt from Illinois state sales and use taxes on materials and equipment to be incorporated in the Work. (Exemption No. [_____]). Said taxes shall not be included in the Bid. Refer to Paragraph SC-7.09 of the Supplementary Conditions for additional information.

ARTICLE 23 – CONTRACTS TO BE ASSIGNED
STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT

Prepared by

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ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

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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.

1. 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.

2. 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 form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting 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, or both; 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 in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the 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; or (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. 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), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree 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 the 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. **Engineer**—The individual or entity named as such in the Agreement.

21. **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.

22. **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. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

23. **Laws and Regulations; Laws or Regulations**—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. **Liens**—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

25. **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.

26. **Notice of Award**—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.

27. **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.

28. **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.

29. **Progress Schedule**—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.

30. **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.

31. **Project Manual**—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.

32. **Resident Project Representative**—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.

33. **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.

34. **Schedule of Submittals**—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.

35. **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.

36. **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.
37. **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 furnished by Owner which are designated for the use of Contractor.

38. **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.

39. **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.

40. **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 thereof.

41. **Successful Bidder**—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.

42. **Supplementary Conditions**—The part of the Contract that amends or supplements these General Conditions.

43. **Supplier**—A manufacturer, fabricator, supplier, distributor, materialman, 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.

44. **Technical Data**—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.

45. **Underground Facilities**—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

46. **Unit Price Work**—Work to be paid for on the basis of unit prices.

47. **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.
48. **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 the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. **Intent of Certain Terms or Adjectives:**

1. 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:**

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. **Defective:**

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
   a. does not conform to the Contract Documents; or
   b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
   c. 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 15.04).

E. **Furnish, Install, Perform, Provide:**

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

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. 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 Bonds and Evidence of Insurance

A. Bonds: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. Evidence of Contractor’s Insurance: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.

C. Evidence of Owner’s Insurance: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), 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 executed 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 specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;

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 Initial 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 for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. 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.

3. 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.

2.06 Electronic Transmittals

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.

B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.

C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items 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 items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

A. The Contract Documents are complementary; what is required by one 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 or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall 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.

3.02 Reference Standards

A. Standards Specifications, Codes, Laws and Regulations

1. 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, shall mean 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, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, 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, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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 Documents 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 Documents 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:**

1. 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 shall 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 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 thereunder.

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 give written notice to Owner and Contractor 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:

1. 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 editions, 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

2. 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 shall preclude 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 thirtieth 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 sixtieth day after the day of Bid opening or the thirtieth 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 shall 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.

1. 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 shall 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 shall 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 the Contract Times and Contract Price. Contractor’s entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor’s ability to complete the Work within the 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. Contractor’s entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor’s ability to complete the Work within the Contract Times. Such an adjustment shall 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 utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and

4. acts of war or terrorism.

D. 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.

E. Paragraph 8.03 governs 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.

F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times 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.
G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor 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; 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 7.12, 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 at law; 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 shall 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 **Specification sections may** identify:

1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); 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 certain Specification sections 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 Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. 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; or
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.
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 either:

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; or

2. is of such a nature as to require a change in the Drawings or Specifications; or

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 the necessity of Owner’s obtaining 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 above; 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. **Possible Price and Times Adjustments:**

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, 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 conditioned on such adjustment being essential to Contractor’s ability to complete the Work within the Contract Times.

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; or
   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 as 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, or both, then any such adjustment shall 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, or both, 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.

5.05 Underground Facilities

A. Contractor’s Responsibilities: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
   1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
   2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
      a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
      b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
      c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
      d. 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 in the Contract Documents, or was not shown or indicated 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), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

C. **Engineer’s Review**: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor’s resumption of Work in connection with the Underground Facility in question; 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 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. **Possible Price and Times Adjustments**:

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, 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. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
   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;
   c. Contractor’s entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor’s ability to complete the Work within the Contract Times; and
   d. 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, or both, then any such adjustment shall 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, or both, no later than 30 days after Owner’s issuance of the Owner’s written statement to Contractor regarding the Underground Facility in question.
5.06 Hazardous Environmental Conditions at Site  

A. Reports and Drawings: The Supplementary Conditions Specification sections may identify:

1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

2. 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 Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. 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; or

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, uncoveres, 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, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, 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.

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 or 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 shall obligate 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 shall obligate 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 all of Contractor’s obligations under the Contract. These bonds shall 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 Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.

B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, 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 shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.

D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.

E. 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.

F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

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. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is
maintaining the policies, coverages, and endorsements 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 and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements 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 and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

E. 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, shall not be construed as a waiver of the other party’s obligation to obtain and maintain such insurance.

F. If either party does not purchase or maintain all of 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.

G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner’s termination rights under Article 16.

H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect 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 shall be adjusted accordingly.

I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor’s interests.

J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor’s liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 Contractor’s Insurance

A. Workers’ Compensation: Contractor shall purchase and maintain workers’ compensation and employer’s liability insurance for:

1. claims under workers’ compensation, disability benefits, and other similar employee benefit acts.

2. United States Longshoreman and Harbor Workers’ Compensation Act and Jones Act coverage (if applicable).

3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor’s employees (by stop-gap endorsement in monopolist worker’s compensation states).
4. Foreign voluntary worker compensation (if applicable).

B. 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:

1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor’s employees.

2. claims for damages insured by reasonably available personal injury liability coverage.

3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.

C. Commercial General Liability—Form and Content: Contractor’s commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:

1. Products and completed operations coverage:
   a. Such insurance shall 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, to the extent permitted by law, including but not limited to coverage of Contractor’s contractual indemnity obligations in Paragraph 7.18.

3. Broad form property damage coverage.

4. Severability of interest.

5. Underground, explosion, and collapse coverage.

6. Personal injury coverage.

7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 01 and CG 20 37 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.

8. 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.

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

E. 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. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

F. Contractor’s pollution liability insurance: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result
of pollution conditions arising from Contractor’s operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

G. **Additional insureds**: The Contractor’s commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.

H. **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 shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.

I. **General provisions**: The policies of insurance required by this Paragraph 6.03 shall:

1. include at least the specific coverages provided in this Article.
2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
4. remain in effect at least until final payment (and longer if expressly required in this Article) 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 Documents.
5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor’s performance of the Work and Contractor’s other obligations under the Contract Documents, whether it is to be performed 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.

J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.
6.04 **Owner’s Liability Insurance**

A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner’s option, may purchase and maintain at Owner’s expense Owner’s own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

B. 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.

6.05 **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 full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder’s risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as “insureds.”

2. be written on a builder’s risk “all risk” policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder’s risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.

4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).

6. extend to cover damage or loss to insured property while in transit.

7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder’s risk insurance.

8. allow for the waiver of the insurer’s subrogation rights, as set forth below.

9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.

10. not include a co-insurance clause.

11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.

12. include performance/hot testing and start-up.

13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.

B. **Notice of Cancellation or Change:** All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed 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.

C. **Deductibles:** The purchaser of any required builder’s risk or property insurance shall pay for costs not covered because of the application of a policy deductible.

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 notice of such occupancy or use to the builder’s risk insurer. The builder’s risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder’s risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder’s risk insurance.

E. **Additional Insurance:** 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 6.05, it may do so at Contractor’s expense.

F. **Insurance of Other Property:** If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.
6.06 Waiver of Rights

A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder’s risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. 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 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 Subcontractors, all individuals or entities identified in the Supplementary Conditions as 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. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

B. 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:
   1. loss 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 perils whether or not insured by Owner; and
   2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner 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.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.

D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work 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 any of the perils or causes of loss covered by builder’s risk insurance and any other property insurance applicable to the Work.

6.07 Receipt and Application of Property Insurance Proceeds

A. Any insured loss under the builder’s risk and other policies of insurance required by Paragraph 6.05 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 6.05 shall 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, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

7.01 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. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 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 at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall 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.

7.03 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 shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and
guarantees required by the Specifications shall 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 shall 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.

7.04 “Or Equals”

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, 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 material or equipment, or items from other proposed suppliers under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an “or equal” item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:

   a. in the exercise of reasonable judgment Engineer determines that:

      1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

      2) it 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) it has a proven record of performance and availability of responsive service; and

      4) it is not objectionable to Owner.

   b. Contractor certifies that, if approved and incorporated into the Work:

      1) there will be no increase in cost to the Owner or increase in Contract Times; and

      2) it 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 shall result in any change in Contract Price. The Engineer’s denial of an “or-equal” request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.

E. **Treatment as a Substitution Request**: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 **Substitutes**

A. Unless the specification or description of an item of material or equipment 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 material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.

1. 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 material or equipment from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.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 material or equipment that Contractor seeks to furnish or use. The application:
   a. shall 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 that specified, and
      3) be suited to the same use as that 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 that specified, and
2) available engineering, sales, maintenance, repair, and replacement services.

d. shall 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 shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 **Concerning Subcontractors, Suppliers, and Others**

A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.

B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities 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, Supplier, or other individual or entity 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 five days.
E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. 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, Suppliers, or other individuals or entities 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, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.

F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, 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, Supplier, or other individual or entity, whether initially or as a replacement, shall 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 fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor’s own acts and omissions.

J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.

K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.

L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
O. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor

2. shall create 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.

7.07 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 a particular 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 shall be disclosed by Owner 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.

7.08 Permits

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. 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.
7.09 **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.

7.10 **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. Except where otherwise expressly required by applicable Laws and Regulations, 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 shall not be Contractor’s responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor’s obligations under Paragraph 3.03.

C. Owner or Contractor may give 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 notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 **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.

7.12 **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. 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.

B. 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. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when 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.

C. Contractor shall comply with the applicable requirements of Owner’s safety programs, if any. The Supplementary Conditions identify any Owner’s safety programs that are applicable to the Work.

D. 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.

E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.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).

F. Contractor’s duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

G. Contractor’s duties and responsibilities for safety and protection shall 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.

7.13 Safety Representative

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

7.14 Hazard Communication Programs

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

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 threatened 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 thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16  

**Shop Drawings, Samples, and Other Submittals**

A.  **Shop Drawing and Sample Submittal Requirements:**

1.  Before submitting a Shop Drawing or Sample, Contractor shall have:
   
   a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
   
   b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
   
   c. determined and verified 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
   
   d. determined and verified all information relative to Contractor’s responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

2.  Each submittal shall 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 submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

B.  **Submittal Procedures for Shop Drawings and Samples:** Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1.  **Shop Drawings:**

   a. Contractor shall submit the number of copies required in the Specifications.

   b. Data shown on the Shop Drawings will 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.D.

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.D.

3. 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. **Other Submittals:** Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.

D. **Engineer’s Review:**
   1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. 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, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
   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 shall 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.
   5. Engineer’s review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 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, shall 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, Sample, or other submittal shall 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.D.4.

E. Resubmittal Procedures:

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 submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer’s time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer’s charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.

3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer’s charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

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 and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor’s warranty and guarantee.

B. Contractor’s warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper 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.

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

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. any inspection, test, or approval by others; or

8. any correction of defective Work by Owner.
D. 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 shall 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 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 performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of 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 shall 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.

C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer’s officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 Delegation of Professional Design Services

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor’s responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.

B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop
Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional’s written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this paragraph, Engineer’s review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer’s review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

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 utility work at or adjacent to the Site, Owner shall provide such information to Contractor.

C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner’s employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. 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.

D. If the proper execution or results of any part of Contractor’s Work depends upon work performed by others under this Article 8, 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.
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 at or adjacent to the Site for Owner, the Owner’s employees, any other contractor working for Owner, or any utility owner for whom the Owner is responsible 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, or both. 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 shall 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. When applicable, any such equitable adjustment in Contract Price shall 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 is conditioned on such adjustment being essential to Contractor’s ability to complete the Work within the Contract Times.

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. 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 to 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.

C. 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 to Contractor.
D. 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 shall 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 Documents (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 10.08. 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 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 Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer’s consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 Rejecting Defective Work

A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 Shop Drawings, Change Orders and Payments

A. Engineer’s authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.

B. Engineer’s authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.

C. Engineer’s authority as to Change Orders is set forth in Article 11.

D. Engineer’s authority as to Applications for Payment is set forth in Article 15.

10.06 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.

10.07 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.

10.08 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, shall 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 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 10.08 shall also apply to the Resident Project Representative, if any.

10.09 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 (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

1. Change Orders:

   a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.

   b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not 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, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.

2. Work Change Directives: 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 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an
adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. **Field Orders**: 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. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

### 11.02 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. Such changes shall be supported by Engineer’s recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes 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 shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate 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.

### 11.03 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.

### 11.04 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 shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.

B. An adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or

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 11.04.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 11.04.C).

C. **Contractor’s Fee**: When applicable, the Contractor’s fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

   a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor’s fee shall be 15 percent;

   b. for costs incurred under Paragraph 13.01.B.3, the Contractor’s fee shall be five percent;

   c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and 11.04.C.2.b is that the Contractor’s fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.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 five 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 shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

   d. no fee shall 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 will be the amount of the actual net decrease in cost plus a deduction in Contractor’s fee by an amount equal to five percent of such net decrease; and

   f. when both additions and credits are involved in any one change, the adjustment in Contractor’s fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

### 11.05 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 shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.

B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor’s progress.

### 11.06 Change Proposals

A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under
the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. **Procedures**: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. 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. The supporting data shall 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. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.

2. **Engineer’s Action**: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor’s supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall 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.

3. **Binding Decision**: Engineer’s decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.

**B. 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 that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

### 11.07 Execution of Change Orders

**A.** Owner and Contractor shall execute appropriate Change Orders covering:

1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
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 11.02, (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 in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

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B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 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 shall be submitted 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; and

3. 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.

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 shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, 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 shall 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 shall 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 shall 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 shall 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 shall 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 shall 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 shall be incorporated in a Change Order 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. 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 shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall 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. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers’ compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable
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 shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall 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, who 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 shall be determined in the same manner as Contractor’s Cost of the Work and fee as provided in this Paragraph 13.01.

4. **Cost of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.**

5. **Supplemental costs including 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, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
   c. **Rentals of all construction equipment and machinery, and the parts thereof,** whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
   d. **Sales, consumer, use, and other similar taxes related to the Work,** and for which 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 property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
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 shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining 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 shall not include any of the following items:

1. Payroll costs and other compensation of Contractor’s officers, executives, principals (of partnerships and sole proprietorships), general managers, safety 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. Expenses of Contractor’s principal and branch offices other than Contractor’s office at the Site.

3. Any part of Contractor’s capital expenses, including interest on Contractor’s capital employed for the Work and charges against Contractor for delinquent payments.

4. 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.

5. 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: When the Work as a whole is performed on the basis of cost-plus, Contractor’s fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor’s fee shall be determined as set forth in Paragraph 11.04.C.

E. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

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:

1. 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

2. 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 on account of any of the foregoing will be valid.

C. **Contingency Allowance:** Contractor agrees that a 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 on account of Work covered by allowances, and the Contract Price shall 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, subject to the provisions of the following paragraph.

E. Within 30 days of Engineer’s written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;

2. there is no corresponding adjustment with respect to any other item of Work; and

3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.
ARTICLE 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 will 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 therewith 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 shall 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 shall 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 shall 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 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 shall 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.

1. 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, 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, or both, 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 shall 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 rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven 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 on account of 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:

1. 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. 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 shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and 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.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor’s legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications:

1. 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, or
b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
c. for Contractor’s failure to comply with Laws and Regulations applicable to Contractor’s performance of the Work, or
d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, 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.

6. 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 on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of 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 that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
   
   j. liquidated 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;
   
   l. there are other items entitling Owner to a set off against the amount recommended.

2. 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 shall 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 shall be treated as an amount due as determined by Paragraph 15.01.C.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 seven 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 shall 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 seven 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:

1. 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 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 6.05 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:

1. 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 7.11), and other
documents, Contractor may make application for final payment.

2. The final Application for Payment shall 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 disputes that Contractor believes are unsettled; 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 Application and Acceptance:

1. 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 ten days after receipt of the final
   Application for Payment, indicate in writing Engineer's recommendation of final
   payment and present the Application for Payment to Owner for payment. Such
   recommendation shall 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. At the same time Engineer will also give written notice
   to Owner and Contractor that the Work is acceptable, subject to the provisions of
   Paragraph 15.07. 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. 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.

D. Payment Becomes Due: Thirty days after the presentation to Owner of the final Application
   for Payment and accompanying documentation, the amount recommended by Engineer
   (less any further sum Owner is entitled to set off against Engineer's recommendation,
including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 Waiver of Claims

A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor’s failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor’s continuing obligations under the Contract Documents.

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 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 terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then 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 other adjacent areas;

2. correct such defective Work;

3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, 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 therefrom.

B. If 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 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 correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).

C. 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.

D. 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.
E. Contractor’s obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not 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, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall 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) ten 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) 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 seven 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 shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 Owner May Terminate For Convenience

A. Upon seven 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):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; 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 on account of loss of anticipated overhead, profits, or revenue, 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 seven 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, seven 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; and

2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising 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; or

2. agree with the other party to submit the dispute to another dispute resolution process; or

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 Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

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 shall not constitute a waiver of that provision, nor shall 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 or completion of the Contract or termination 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 **Headings**

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

UTILITIES

The Contractor shall be responsible for notifying all utilities prior to any excavation. Locations of utilities shown on these plans are approximate and shall be verified by the Contractor prior to any excavation with no additional compensation.

AUTHORITY OF ENGINEER

The authority of the Engineer as defined in Article 105.01 of the Standard Specifications shall be re-defined as follows:

"All work shall be done under the observation of the Engineer and shall be done in accordance with requirements of the Contract. The Engineer shall decide all questions which arise as to the interpretation of the Plans and Specifications and as to disputes and mutual rights between Contractors under the Specifications. The Engineer will determine the quality and acceptability of materials furnished and work performed, rate of progress of the work, and acceptable fulfillment of the Contract. The Engineer will determine the amount of materials furnished and work performed. The Engineer's advice and determinations shall be conditions precedent to the right of the Contractor to receive money due the Contractor under the Contract."

"The Engineer will notify the Contractor in writing if the work is to be suspended wholly or in part due to the failure of the Contractor to carry out provisions of the contract; for failure to carry out orders; for such periods due to unsuitable weather; for conditions considered unsuitable for the prosecution of the work or for any other condition or reason deemed to be in the public interest."

"In case of failure on the part of the Contractor to execute work as directed by the Engineer, the Engineer may, at the expiration of a period of 48 hours after giving notice in writing to the Contractor, proceed to execute such work as may be deemed necessary, and the cost thereof shall be deducted from compensation due or which may become due the Contractor under the contract."

The Engineer shall not assume any of the responsibilities of the Contractor's superintendent or of Subcontractors; shall not expedite the work for the Contractor; and shall not advise on, or issue directions concerning aspects of construction means, methods, techniques, sequences or procedures, or safety precautions in connection with the work.

WORKER'S COMPENSATION INSURANCE

In addition the requirements of Article 107.02 of the Standard Specifications, Certificates of Insurance shall be presented to the Owner within ten (10) calendar days after the receipt by the Contractor of the Notice of Award and the unexecuted Contract, it being understood and agreed that the owner will not approve and execute.

INDEMNIFICATION

In addition to the requirements of Article 107.26 of the Standard Specifications, the Contractor shall indemnify and hold harmless the Owner, its officers, agents and employees against all loss, damage or expense that it or they may sustain as a result of any suits, actions, or claims of any character brought on account of injury to or death of any person or persons, including all persons performing any work under this Contract which may arise in any way in connection with the work to be performed under this Contract.
The Contractor shall also indemnify and save harmless the Owner, its officers, agents and employees, from all suits, actions or claims of any character brought because of any injuries or damages received or sustained by any person, persons or property on account of, or in consequence of, any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered for any claims or amounts arising or recovered under the "Workmen's Compensation Act", or any other law, ordinance, order, or decree, and so much of the money due the said Contractor under and by virtue of his Contract as shall be considered necessary by the Owner for such purposes, may be retained for the use of the Owner; or in case no money is due, his surety shall be held until such suits, actions or claims have been settled and suitable evidence to that effect furnished to the Owner.

In addition, the Contractor shall hold the Owner, its officers, agents and employees harmless for any and all claims for labor, material, apparatus, equipment, fixtures or machinery furnished to the Contractor for the purpose of performing the work under the Contract; and the payment of all direct and indirect damages to any person, firm, company or corporation suffered or sustained on account of the performance of such work during the time the Contract is in force.

In the event that, as a result of any agreement or actions taken, the Owner is made a party defendant in any litigation arising by reason of any agreement, the Contractor agrees to defend and hold harmless the Owner, its officers and agents, from any suits, claims, demands, set offs or other action reduced to judgment arising there from. The obligation of the Contractor therefore shall include and extend to payment of reasonable attorneys' fees for the representation of the Owner and its said officers and agents in such litigation and include expenses, court costs and fees; it being understood that the Contractor shall have the right to comply with such attorneys to represent the Owner and its officers and agents in such litigation subject to the approval of the Owner, which approval shall not be unreasonably withheld. The Contractor shall have the right to appeal to courts appellate jurisdiction any judgment taken against the Owner or its officers or agents in the respect, and the Owner shall join in any such appeal taken by the Contractor. The Contractor shall hold the Owner, its officers, agents and employees harmless for any and all claims for labor, material, apparatus, equipment, fixtures or machinery furnished to the Contractor for the purpose of performing the work under the contract; and the payment of all direct and indirect damages to any person, firm, company or corporation suffered or sustained on account of the performance of such work during the time the contract is in force. The Contractor shall execute the "Hold Harmless Agreement" in the form attached.

VENUE OF LAWSUITS

The parties of this Contract agree that if any dispute arising from the pursuit of said Contract requires the filing of a lawsuit, venue of such lawsuit shall be in the Circuit Court of Will County, Illinois.

SUBSTANCE ABUSE PREVENTION PROGRAM

Before the Contractor and any subcontractor commences work, the Contractor and any subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in Public Act 95-0635 as enacted by the Illinois General Assembly or shall have a collective bargaining agreement in effect dealing with the subject matter of Public Act 95-0635.

The Contractor and any subcontractor shall file with a public body: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act, or a letter certifying that the Contractor or a subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act. The apparent low Bidder, upon notification of contract award by the Owner, shall submit the required documents with the executed contract documents and insurance certificates. The Contractor is responsible for obtaining all appropriate documentation from their subcontractors and submitting to the Engineer.
PREVAILING WAGE RATES

All wages paid by the Contractor and each subcontractor shall be in compliance with the Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the revised rate as provided by the public body shall apply to this contract and the Contractor will not be allowed additional compensation on account of said revisions.

Current Prevailing Wage Rates can be obtained at the Illinois Department of Labor web site located at: https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx

The Contractor and each subcontractor shall make and keep, for a period of not less than 3 years, records of all laborers, mechanics, and other workers employed by them on the project; the records shall include each worker’s name, address, telephone number when available, social security number, classification or classifications, the hourly wages paid in each period, the number of hours worked each day, and the starting and ending times of work each day.

The Contractor and each subcontractor shall submit monthly, in person, by mail, or electronically, a certified payroll to the public body in charge of the project. The certified payroll shall consist of a complete copy of the records. The certified payroll shall be accompanied by a statement signed by the contractor or subcontractor which avers that:

(i) such records are true and accurate;
(ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required; and
(iii) the contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor.

Upon 2 business days’ notice, the Contractor and each subcontractor shall make available for inspection the records to the public body in charge of the project, its officers and agents, and to the Director of Labor and his deputies and agents at all reasonable hours at a location within this State. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department of Labor.

EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS

If at the time this Contract is executed, or if during the term of this Contract, there is excessive unemployment in Illinois as defined in the Illinois Workers on Public Works Act, 30 ILCS 570-0.01 et seq., as two consecutive months of unemployment exceeding 5%, the Contractor agrees to employ Illinois laborers. An “Illinois laborer” is defined as any person who has resided in Illinois for at least thirty (30) days and intends to become or remain an Illinois resident.

ILLINOIS STEEL PRODUCTS PROCUREMENT ACT

The Illinois Steel Products Procurement Act (30 ILCS 565) is applicable to this project. This Act includes various requirements pertaining to the origin of steel products which will be used in the construction of this project. http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=548

OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION RULES & REGULATIONS

All work described herein and as shown on the accompanying plan sheets shall comply in all respects to pertinent articles of the current edition of the State and Federal Governments’ rules and regulations concerning occupational safety and health standards.
Within Section 1926.652(a), OSHA requires that every jobsite with excavations must have a “Competent Person” present to evaluate the potential for hazards to employees. It shall be the responsibility of the Contractor to provide the required “Competent Person” as defined below.

He must ensure that every trench 5' or more in depth have a protective system. He must ensure that every trench less than 5' undergo an inspection to determine whether a collapse hazard to employees exists. If a collapse hazard is detected, an appropriate protective system must be used.

A “Competent Person” is defined as one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous or dangerous to employees and who has the authorization to take prompt corrective measures to eliminate them.

“Competent Person” responsibilities:

- Understand the standards and any and all data provided.
- Select proper protective system based on soil type
- Recognize and reclassify soil after changing conditions
- Conduct air test for hazard atmospheres
- Design structural ramps
- Locate underground installations/utilities
- Monitor water removal equipment
- Perform inspections prior to work daily
- Inspect after each hazard-increasing event
- Responsible for ensuring OSHA compliance

**AMENDMENTS TO EJCDC C-700 (2013 EDITION)**

A. These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

B. 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.

C. 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 thereto.

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SC-1.01.A Defined Terms

Insert in the first sentence after the phrase “printed with initial capital letters” the following phrase: “or with all capital letters”

SC-1.01.A.8 Change Order

Insert a comma and the word “ENGINEER” immediately after the word “CONTRACTOR” in this definition.

SC-1.01.A.18 Drawings

The following Drawings are part of the Contract Documents:

Drawings titled “14th Street to 18th Street Water Main and Road Reconstruction Improvements, City of Lockport, Illinois,” Sheets No. 1 through No. 148, prepared by Chamlin & Associates, Inc., and Drawings listed in the table of contents that are bound at the back of these Specifications.

Electronic files were provided for the convenience of CONTRACTOR. The data on which CONTRACTOR may rely is limited to the paper copy.

SC-1.01.A.48 Work Change Directive

Amend the phrase “signed by OWNER” in the first sentence of Paragraph 1.01.A.48 to read as follows:

“signed by OWNER and CONTRACTOR.”

Add the following language to the end of Paragraph 1.01.A.48:

A Work Change Directive cannot change Contract Price or Contract Times without a subsequent Change Order.

SC-1.01.A.49 Request for Information

Add the following new paragraph immediately after Paragraph 1.01.A.48:

49. Request for Information:

Written request submitted by CONTRACTOR to ENGINEER on a form supplied by ENGINEER requesting clarification, interpretation, or additional information pertaining to Contract Documents.
SC-1.01.A.50 Consulting Engineer

Add the following new paragraph immediately after Paragraph 1.01.A.49:

The CONSULTING ENGINEER on this project is Chamlin & Associates, Inc. (Chamlin). Chamlin will assume the role of the ENGINEER only as defined in Divisions 00 and 01. The role of ENGINEER where defined in the Special Provisions will be performed by OWNER. OWNER may delegate some of these duties to the CONSULTING ENGINEER as defined in an Agreement between these two parties.

SC-2.01 Delivery of Bonds and Evidence of Insurance

Delete Paragraphs 2.01 B. and C. in their entirety and insert the following in their place:

B. Evidence of CONTRACTOR’s Insurance: When CONTRACTOR delivers the executed counterparts of the Agreement to OWNER, CONTRACTOR shall also deliver to OWNER copies of the policies of insurance (including all endorsements, and identification of applicable self-insured retentions and deductibles) required to be provided by Contractor in Article 6. CONTRACTOR may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

SC-2.02 Copies of Documents

Amend the first sentence of Paragraph 2.02.A. to read:

OWNER shall furnish to CONTRACTOR three copies of the Contract Documents (including one fully executed counterpart of the Agreement) and one copy in electronic portable document format (PDF).

SC-2.03 Before Starting Construction

Add the following subparagraph to Paragraph 2.03:

4. a proposed listing of subcontractors and major material and equipment suppliers. The list shall include any proposed substitutions in accordance with Paragraph 7.05.

SC-2.03, 2.04, 2.05 Schedules and Conferences

Add the following language to the end of Paragraph 2.05.A.3:

The Bid will be considered the Schedule of Values of the Work required by the General Conditions.

SC-2.05 Initial Acceptance of Schedules

Add the following language to the end of Paragraph 2.05.A.2:

The schedule for shop drawings shall show all submittals complete before 50% of completion of the Work and the schedule for maintenance manuals shall show all submittals complete before 75% of completion of the Work.

Add the following new paragraph immediately after Paragraph 2.05.A:

B. The times included in this paragraph apply to the preliminary schedules. See Division 01 for other submittal and time requirements for the construction progress schedule and submittal schedule.

Add the following language to the end of Paragraph 2.05.A.3:

The Bid will be considered the Schedule of Values of the Work required by the General Conditions.
SC-2.06 Electronic Submittals

Delete Paragraph 2.06.B and replace it with the term [Deleted].

SC-3.03 Reporting Discrepancies

Add the following language at the end of Paragraph 3.03.A:

4. CONTRACTOR shall report apparent discrepancies to ENGINEER using a Request for Information form on a form supplied by Engineer. The Request for Information form shall:
   a. be submitted by CONTRACTOR only;
   b. be legible and complete;
   c. not be used for the purposes of only confirming or verifying issues; and,
   d. be prioritized by CONTRACTOR in the event that multiple Requests for Information are outstanding.

Requests for Information that are not in conformance with the requirements above shall be returned to CONTRACTOR without response.

5. CONTRACTOR shall not be relieved of its responsibility to coordinate the Work to prevent adverse impacts to CONTRACTOR’s Project Schedule while submitting Requests for Information.

6. If CONTRACTOR believes the Scope of Work included in the Request for Information has a cost and/or time impact, CONTRACTOR should submit a claim in accordance with Article 12 of these General Conditions.

7. If CONTRACTOR proceeds with work when CONTRACTOR had actual knowledge or should have known that a conflict, error, ambiguity, or discrepancy existed as indicated above, correction of work constructed without such notification to ENGINEER shall be at CONTRACTOR’s expense, (except in an emergency as authorized by Paragraph 7.15.A).

SC-3.04 Requirements of the Contract Documents

Delete Paragraph 3.04.C in its entirety.

SC-4.01 Commencement of Contract Times; Notice to Proceed

In the last sentence of Paragraph 4.01.A, change “sixtieth day” to “eighty-fifth day.”

SC-4.03 Reference Points

Add the following new paragraph immediately after Paragraph 4.03.A:

B. CONTRACTOR is referred to the General Requirements for additional requirements for laying out the work.

SC-4.05 Delays in Contractor’s Progress

Amend the first sentence of Paragraph 4.05.D by adding the word “unreasonable” immediately before the word “delays.”
SC-5.05 Underground Facilities

Delete Paragraph 5.05.E in its entirety and insert the following in its place:

E. CONTRACTOR is referred to the General Requirements for requirements for keeping records of Underground Facilities and allowing facility owners to inspect.

SC-5.06 Hazardous Environmental Conditions

Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to OWNER.

B. Not Used.

SC-6.01 Performance and Payment Bonds

Add the following new paragraphs immediately after Paragraph 6.01.F:

G. The forms of the performance and payment Bonds attached hereto shall be used for the Contract. Note instructions thereon as to the form applicable. Each form contemplates one corporate surety only. In case co-sureties or individual sureties will be furnished, proper forms therefore shall be obtained. Besides the stipulations of Paragraphs 6.01 through 6.03, the surety on the Bonds shall provide a certificate indicating surety is licensed to underwrite contracts in the jurisdiction of the project location which shall be attached to the Bonds.

H. Bonds shall be placed with surety with a Best’s rating of no less than AA–.

SC-6.03 CONTRACTOR’s Insurance

Add the following to the end of Paragraph 6.03.C.7:

All additional insureds shall be endorsed on the policy as required in Paragraph 6.03.C.7.

Delete Paragraph 6.03.C.8 in its entirety and add the following new paragraphs immediately after Paragraph 6.03.C.7:

8. Insurance certificates for commercial general, automobile, and umbrella shall specifically indicate by name the additional insureds which are to include OWNER and ENGINEER as well as other persons or entities so identified. Certificates shall be Acord 25-S or equivalent.

9. Endorsements or General Liability policy shall not exclude supervisory or inspection services.

Add the following new language to the end of Paragraph 6.03.D:

CONTRACTOR shall also provide an Additional Insured Endorsement for the automobile policy. Endorsement form shall be CA 20 48, or equal.

Add the following new language to the end of Paragraph 6.03.G:

CONTRACTOR shall provide an executed endorsement form GC 20 01 04 13, or equal, supporting this requirement.
Change in Paragraph 6.03.I.3 the phrase “materially changed” to read “materially changed with respect to coverage on the project.”

Add the following new paragraph immediately after Paragraph 6.03.I.5:

10. Waiver of Subrogation: CONTRACTOR’s commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall provide a waiver of subrogation covering OWNER and ENGINEER, and any individuals or entities identified in the Supplementary Conditions. CONTRACTOR shall obtain all necessary endorsements to support these requirements. Endorsement shall be CG 24 04 05 09, or equal.

Delete Paragraph 6.03.J in its entirety and insert the following new paragraph in its place:

J. The stated limits of Paragraphs 6.03.K.1, 6.03.K.2, and 6.03.K.3 can be obtained through individual policies or in conjunction with an umbrella policy (pay on behalf form) to arrive at the total limits requested.

Add the following new paragraph immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers’ Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

   - State: __________ Statutory
   - Federal, if applicable (e.g., Longshoreman’s): __________ Statutory

   Employer’s Liability:
   - Bodily injury, each accident $ __________
   - Bodily injury by disease, each employee $ __________
   - Bodily injury/disease aggregate $ __________

   Foreign voluntary worker compensation __________ Statutory

2. CONTRACTOR’s Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:

   - General Aggregate $ __________
   - Products - Completed Operations Aggregate $ __________
   - Personal and Advertising Injury $ __________
   - Each Occurrence (Bodily Injury and Property Damage) $ __________

General Aggregate Limits specified above shall apply separately to this project by attachment of:

“Amendment of Limits of Insurance–Designated Location(s) General Aggregate Limit Endorsement (ISO Form No. CG 25040509) or “Designated Construction Project(s) General Aggregate Limit” Endorsement (ISO Form CG 25030509) or
equivalent endorsement coverage.

3. Automobile Liability under Paragraph 6.03.D. of the General Conditions: Bodily Injury:
   - Bodily Injury:
     - Combined Single Limit of $1,000,000

4. Excess or Umbrella Liability:
   - Per Occurrence $2,000,000
   - General Aggregate $2,000,000

5. CONTRACTOR’s Pollution Liability:
   - Each Occurrence $2,000,000
   - General Aggregate $2,000,000

☐ If box is checked, CONTRACTOR is not required to provide CONTRACTOR’s Pollution Liability insurance under this Contract

CONTRACTOR’s Pollution Liability coverage shall include coverage for fungus, mold, and bacteria.

6. General Liability, Automobile Liability, and Umbrella Liability shall include coverage for mental anguish, punitive damages, and electronic data liability.

7. Additional Insureds: In addition to OWNER and ENGINEER, include as additional insureds the following: Chamlin & Associates, Inc.

SC-6.05. A CONTRACTOR’s Installation Floater Insurance

Delete Paragraph 6.05.A in its entirety and insert the following in its place:

A. CONTRACTOR shall provide and maintain installation floater insurance for property under the care, custody, or control of CONTRACTOR. The installation floater insurance shall be a broad form or “all risk” policy providing coverage for all materials, supplies, machinery, fixtures, and equipment that will be incorporated into the Work. Coverage under the CONTRACTOR’s installation floater will include:

1. any loss to property while in transit,
2. any loss at the Site, and
3. any loss while in storage, both on-site and off-site.
4. include the OWNER and CONTRACTOR as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as “insureds.”
Coverage cannot be contingent on an external cause or risk or limited to property for which CONTRACTOR is legally liable. CONTRACTOR will be solely responsible for any deductible carried under this coverage and claims on materials, supplies, machinery, fixture, and equipment that will be incorporated into the Work while in transit or in storage. This policy will include a waiver of subrogation applicable to OWNER, CONTRACTOR, ENGINEER, all Subcontractors, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them.

**SC-6.06 Waiver of Rights**

Delete Paragraphs 6.06.A, 6.06.B, and 6.06.C in their entirety and insert the following in its place:

A. Not used.

B. Not used.

C. Not used.

**SC-6.07 Receipt and Application of Insurance Proceeds**

Amend the second sentence of Paragraph 6.07.B by striking out the following words: “the dispute resolution provisions of this Contract or.”

**SC-7.02.B Labor; Working Hours**

Add the following new subparagraphs immediately after Paragraph 7.02.B:

1. Regular working hours will be 7 A.M. until 6 P.M. Monday through Saturday. CONTRACTOR shall notify OWNER by noon the previous Friday if CONTRACTOR plans to work on Saturday. No work will be allowed on Sunday.


Add the following new paragraph immediately after Paragraph 7.02.B:

C. See the General Requirements and SC-8.02 for special requirements concerning schedule sequencing, etc.

**SC-7.03.B Materials and Equipment Warranty**

Add the following to the end of Paragraph 7.03.B:

Suppliers shall be deemed to impliedly warrant that their products and all component materials incorporated into them are suitable and fit for the intended use of such products and shall be free from defect in material, workmanship or design, such warranty to run to the benefit of OWNER and ENGINEER. The foregoing applies whether the products or their component materials are specified in the Contract Documents or are of Supplier’s design.

**SC-7.07 Patent Fees and Royalties**

Delete Paragraph 7.07.A in its entirety and insert the following in its place:

A. Not used.
SC-7.08 Permits
Delete last sentence of Paragraph 7.08.A and add the following in its place:

See General Requirements and technical specification sections for utility charge provisions.

Add paragraph 7.08.B as follows:

B. See General Requirements for additional permit information.

SC-7.09 Taxes
Add the following language at the end of Paragraph 7.09.A:

No charge will be allowed for taxes from which OWNER is exempt. OWNER is not liable for the Illinois Retailer’s Occupation Tax, the Service Occupation Tax or the Service use Tax. OWNER is exempt from Federal Excise and Transportation Tax. Refer to Illinois Administrative Code 64-216, Section 130.2075 for details.

Add the following new paragraph immediately after Paragraph 7.09.A:

B. OWNER is exempt from payment of sales and compensating use taxes of the State of Illinois, the City of Lockport, and the County of Will on all materials to be incorporated into the Work.

1. OWNER will furnish the required certificates of tax exemption to CONTRACTOR for use in the purchase of supplies and materials to be incorporated into the Work.

2. OWNER’s exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by CONTRACTOR, or to supplies or materials not incorporated into the Work.

SC-7.10 Laws and Regulations
Add the following new paragraph immediately after Paragraph 7.10.C:

D. CONTRACTOR shall comply with Employment of Illinois Workers on Public Works Act 30 ILCS 570, which requires contractors to use Illinois laborers on all public works construction and improvement projects during a period of excessive unemployment. Excessive unemployment is defined as any month immediately following two consecutive calendar months that the Illinois unemployment rate exceeds 5%, CONTRACTOR agrees to employ a work force that is comprised of at least 90% Illinois laborers. An “Illinois laborer” is defined as any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.

SC-7.11 Record Documents
In Paragraph 7.11.A delete last sentence and insert the following:

Upon completion of the Work, these record documents, samples, and shop drawings shall be delivered by CONTRACTOR to OWNER.

SC-7.13 Competent Person
Add the following new paragraph immediately after Paragraph 7.13.A:

B. CONTRACTOR shall keep at the Site at all times during the progress of the Work a competent
person to comply with OSHA trenching and excavation requirements. The competent person shall be one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

SC-7.16 Shop Drawings

Add the following new paragraphs immediately after Paragraph 7.16.E:

F. CONTRACTOR shall furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than three submittals. Engineer will record ENGINEER’s time for reviewing subsequent submittals of Shop Drawings, samples or other items requiring approval and Contractor shall reimburse OWNER for ENGINEER’s charges for such time.

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

SC-7.17 Contractor’s General Warranty and Guarantee

Add the following new paragraph immediately after Paragraph 7.17.D:

E. At a minimum, CONTRACTOR’s general warranty shall extend throughout the correction period as defined in Paragraph 15.08.

SC-7.18 Indemnification

Add the following to the end of Paragraph 7.18.A:

In addition, CONTRACTOR shall indemnify, hold harmless, and pay for the defense of OWNER and ENGINEER from and against claims, losses, or damages in regard to any act or failure to act by OWNER or ENGINEER in connection with general supervision, inspection and/or coordination of CONTRACTOR’s operations.

CONTRACTOR shall, at its own expense, appear, defend, and pay all fees of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and, if any judgments shall be rendered against any individual or entity indemnified hereunder in any such action, CONTRACTOR shall, at its own expense, satisfy and discharge same. CONTRACTOR expressly understands and agrees that any Letter of Credit or insurance protection required by the Contract, or otherwise provided by CONTRACTOR, shall in no way limit the responsibility to indemnify, keep and, save harmless, and defend any individual or entity indemnified hereunder as herein provided.

Delete Paragraph 7.18.C.1 and 7.18.C.2. Insert new Paragraphs 7.18.C.1 and D:

1. the preparation of Drawings, Specifications, or Property Surveys.

D. For any matter for which OWNER and ENGINEER are indemnified under Paragraph 7.18.A, CONTRACTOR shall pay for OWNER’s and ENGINEER’s reasonable defense, 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 or awards until Owner or Engineer are found negligent. If OWNER or ENGINEER are found negligent, OWNER or ENGINEER shall reimburse CONTRACTOR for the prorated extent of OWNER’s or ENGINEER’s negligence for the cost of OWNER’s or ENGINEER’s reasonable defense.
E. In Paragraphs 7.18.A through D as may be amended by the Supplementary Conditions, ENGINEER shall also include Chamlin & Associates, Inc.

SC-7.19 Delegation of Professional Design Services

Add the following new paragraphs immediately after Paragraph 7.19.E:

F. The design professional providing the design calculations and design drawings shall be licensed in the State of the Project.

G. The design calculation and design drawings are not shop drawings but shall be submitted to ENGINEER separately along with the required shop drawings for the system, material, or equipment specified. These calculations will be forwarded to OWNER for their records.

SC-8.03 Legal Relationships

Amend the first sentence of Paragraph 8.03.A by inserting the word “unreasonably” immediately before the word “delays.”

SC-9 OWNER’s Responsibilities

Add the following new paragraph immediately after Paragraph 9.12:

SC-9.13 OWNER’s Site Representative

A. During construction, OWNER will assume all duties and responsibilities of ENGINEER as defined in Article 10. OWNER may choose to delegate some of those duties and some of items defined in the Special Provisions to the CONSULTING ENGINEER as defined in any Agreement between these parties.

SC-10 ENGINEER’s Status During Construction

Add the following new paragraph immediately after Paragraph 10.03.A:

B. Chamlin & Associates, Inc. provided design services for the Project. Chamlin & Associates, Inc. shall be provided with the same indemnifications as ENGINEER as provided for in Paragraph 7.18 as may be amended by the Supplementary Conditions and shall be listed as an additional insured as provided for ENGINEER under Article 6 as may be amended by the Supplementary Conditions.

SC-10.03 Project Representative

Add the following new paragraphs immediately after Paragraph 10.03.A:

B. The Resident Project Representative (RPR) will be ENGINEER’s representative at the Site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR’s actions.

1. General: RPR’s dealings in matters pertaining to the Work in general shall be with ENGINEER and CONTRACTOR. RPR’s dealings with Subcontractors shall only be through or with the full knowledge and approval of CONTRACTOR. RPR shall generally communicate with OWNER only with the knowledge of and under the direction of ENGINEER.
2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and Schedule of Values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.

3. Conferences and Meetings: Attend meetings with CONTRACTOR, such as preconstruction conferences, and progress meetings.

4. Liaison:
   a. Serve as ENGINEER’s liaison with CONTRACTOR. Working principally through Contractor’s authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
   b. Assist ENGINEER in serving as OWNER’S liaison with CONTRACTOR when CONTRACTOR’S operations affect OWNER’S on-site operations.
   c. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.

5. Interpretation of Contract Documents: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.

6. Modifications: Consider and evaluate CONTRACTOR’S suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR’S recommendations, if any, to ENGINEER. Transmit to CONTRACTOR in writing decisions as issued by ENGINEER.

7. Review of Work and Rejection of Defective Work:
   a. Conduct on-Site observations of CONTRACTOR’S work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.
   b. Report to ENGINEER whenever RPR believes that any part of CONTRACTOR’S work in progress is defective, will not produce a completed Project that conforms generally to the Contract Documents, or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

8. Tests and System Start-ups:
   a. Observe that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate OWNER’S personnel, and that CONTRACTOR maintains adequate records thereof.
   b. Observe, record, and report to ENGINEER appropriate details relative to the test procedures and systems start-ups.

9. Records:
   a. Prepare a daily report or keep a diary or logbook and send periodic reports to ENGINEER.
10. **Reports:**

   a. Furnish to ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR’s compliance with the Progress Schedule and schedule of Shop Drawing and Sample submittals.

   b. Draft and recommend Engineering proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from CONTRACTOR.

   c. Immediately notify ENGINEER of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, force majeure or delay events, damage to property by fire or other causes, or the discovery of any Constituent of Concern or Hazardous Environmental Condition.

11. **Payment Requests:** Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

12. **Certificates, Operation and Maintenance Manuals:** During the course of the Work, review materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to ENGINEER for review and forwarding to Owner prior to payment for that part of the Work.

13. **Completion:**

   a. Participate in ENGINEER’s visits to the Site to determine Substantial Completion, assist in the determination of Substantial Completion and the preparation of a punch list of items to be completed or corrected.

   b. Participate in ENGINEER’s final visit to the Site to determine completion of the Work, in the company of OWNER and CONTRACTOR, and prepare a final punch list of items to be completed and deficiencies to be remedied.

   c. Observe whether all items on the final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the notice of acceptability of the work.

C. **The RPR shall not:**

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including “or-equal” items).

2. Exceed limitations of ENGINEER’s authority as set forth in the Contract Documents.

3. Undertake any of the responsibilities of CONTRACTOR, Subcontractors, or Suppliers.

4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of CONTRACTOR’s work.

5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of OWNER or CONTRACTOR.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by ENGINEER.

7. Accept Shop Drawing or Sample submittals from anyone other than CONTRACTOR.

8. Authorize OWNER to occupy the Project in whole or in part.

SC-11.01 Amending the Contract Documents; Changes in the Work
Delete Paragraph 11.01.A.1.b in its entirety.

SC-11.02 Owner-Authorized Changes in the Work
Amend the second sentence in Paragraph 11.02.A to read as follows:

Such changes shall be supported by ENGINEER’s recommendation.

SC-11.04 Change of Contract Price
Amend the phrase at the end of Paragraph 11.04.B.2 to read:

(which may include an allowance for overhead and profit in accordance with paragraph 11.04.C.2, unless OWNER and CONTRACTOR agree that these allowances are not appropriate for the Work involved.)

Amend Paragraph 11.04.C.2.a by replacing the number “15” with the number “10.”

Amend Paragraph 11.04.C.2.b by replacing the word “five” with the word “three.”

Amend Paragraph 11.04.C.2.c by replacing the number “15” with the number “10,” replacing the word “five” with the word “three,” and replacing the number “27” with the number “15.”

SC-11.06.B Change Proposals
Delete Paragraph 11.06.B in its entirety.

SC-11.07 Execution of Change Orders
Amend the first sentence within Paragraph 11.07.A to read as follows:

A. OWNER and CONTRACTOR shall execute appropriate Change Orders, recommended by ENGINEER.

SC-11.08 Notification to Surety
Add the following new paragraphs immediately after Paragraph 11.08.A:

B. CONTRACTOR shall be responsible for notifying the surety of any assignment, modification, or change of the Contract, change in the Work covered thereby, or extension of time for the completion of the project.

C. Failure to provide notice to the surety of any such change shall not exonerate the surety from its obligations under the bond.

SC-12.01.A Claims Process
Insert the following immediately after “Claims Process” in Paragraph 12.01.A:
All Claims, except those waived pursuant to Paragraph 15.07, shall be referred to ENGINEER for decision. A decision by ENGINEER shall be required as a condition precedent to any exercise by OWNER or CONTRACTOR of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

Delete Paragraph 12.01.A.3 in its entirety.

Delete Paragraphs 12.01.D. 12.01.E, and 12.01.F in their entirety and insert the following in its place:

D. Not used.

E. Not used.

F. Not used.

Amend the first sentence of Paragraph 12.01.G by striking out the following words: “whether through approval of the claim, direct negotiations; mediation, or otherwise; or if a claim is approved in part or denied in full and such actions become final and binding;”

SC-13.03 Unit Price Work

Delete Paragraph 13.03.E in its entirety.

SC-14.01 Access to Work

Add the following paragraph after Paragraph 14.01.A of the General Conditions:

B. Representatives of the Illinois Environmental Agency (IEPA), or any of their duly authorized representatives will have full access to and the right to examine any pertinent books, documents, papers and records of CONTRACTOR involving transactions related to the project.

SC-14.02.A Tests and Inspections

Add the following to the beginning of Paragraph 14.02.A:

All Work is subject to testing to indicate compliance with Contract Document requirements. Duplicate copies of test results of all tests required shall be submitted to ENGINEER. Tests and inspection of work may be conducted by OWNER or an independent laboratory employed by OWNER. Tests may also be performed in the field by Engineer as a basis for acceptance of the Work.

Add the following to the end of Paragraph 14.02.A:

Samples required for testing shall be furnished by CONTRACTOR at no cost to OWNER. In the event that completed Work does not conform to specification requirements during the initial test, the Work shall be corrected and retested for conformance. The entire cost of retesting completed Work shall be borne by CONTRACTOR. This shall include the extra cost for inspection to OWNER which will be deducted from the final amount due CONTRACTOR.

SC-15.01 Progress Payments

Add the following language at the end of Paragraph 15.01.B.1:
An updated Progress Schedule shall be submitted with each Application for Payment. Applications for Payment submitted without an acceptable updated Progress Schedule will be returned to CONTRACTOR without review. Progress Schedules that are submitted which do not reflect current project conditions, will not be considered acceptable.

**SC-15.01.B Applications for Progress Payment**

Add the following language at the end of Paragraph 15.01.B.3:

No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage or invest the retainage for the benefit of CONTRACTOR.

Add the following paragraph after Paragraph 15.01.B.3:

4. CONTRACTOR shall submit with each pay request CONTRACTOR’s partial waiver of lien for the full amount of the requested payment. Beginning with the second pay request, and with each succeeding pay request, CONTRACTOR shall submit partial waivers of lien for each Subcontractor and Supplier showing that the amount paid to date to each is at least equivalent to the total value of Subcontractor’s or Supplier’s work, less retainage, included on the previous pay request. Contractor shall submit with each pay request a signed Waiver of Lien Log clearly documenting the following:

a. The names of all Subcontractors/Suppliers on the project.

b. Contract amounts for each Subcontractor/Supplier.

c. Amount paid to date to each Subcontractor/Supplier.

d. Lien waivers provided with current pay application for previous month’s payments.

e. Amount to be paid to each Subcontractor/Supplier included in the pending pay request.

f. Remaining balance for each Subcontractor/Supplier.

5. CONTRACTOR shall submit one original and one copy on 8-1/2 by 11 paper of each lien waiver submitted.

6. CONTRACTOR shall submit a certified payroll with each pay request.

7. CONTRACTOR shall submit five copies of each pay request for approval.

8. No advanced payment for shop drawing preparation will be made. Shop drawing costs will be paid when equipment and materials are delivered and suitably stored on the site.

9. All stored equipment and materials for which payment is requested shall have two copies of invoices included with the pay request. Equipment shall be identified thoroughly on the invoices, including serial numbers.

10. Payment for the stored equipment and material which are on the site shall not exceed the invoiced amount for each item, less the Contract retainage. The overhead and profit for the stored items shall not be invoiced until the item is installed.
11. Payment for off-site storage is normally reserved for sensitive or very large pieces of equipment that in ENGINEER’s opinion would not be practical to have stored on the site. Payment for off-site stored items shall be limited to 75% of the invoiced value of the item, less Contract retainage. CONTRACTOR shall reimburse OWNER the cost of inspecting off-site stored items. When off-site storage is approved, CONTRACTOR shall provide Insurance Certificates and Document of Ownership to OWNER.

SC-15.02 CONTRACTOR’s Warranty of Title

Amend Paragraph 15.02.A by striking out the following text: “no later than seven days after the time of payment by OWNER” and insert “no later than the time of payment by OWNER.”

SC-15.08.A Correction Period

Delete in Paragraph 15.08.A the phrase “If within one year after the date of Substantial Completion” and insert in its place the following:

“If within one year of the date of final payment or from the date established by ENGINEER that the Work or portion thereof began operating or was used in a continuous, satisfactory manner for its intended purpose, whichever is earlier,”

SC-16.02 OWNER May Terminate for Cause

Add the following new paragraphs immediately after Paragraph 16.02.B.2:

3. complete the Work as OWNER may deem expedient at the expense of CONTRACTOR and surety;

4. apply the amounts retained from partial payments to the completion of the Work; and

5. authorize the surety to complete the steps in Paragraphs 16.02.B.1 through 4.

SC-16.03 OWNER May Terminate for Convenience

Add the following paragraph after Paragraph 16.03.B:

C. CONTRACTOR shall require similar provisions contained in Paragraph 16.03 in each of its subcontracts to protect CONTRACTOR from claims by Subcontractors arising from the OWNER’s termination for convenience, or to minimize claims by such subcontractors. The remedy provided to CONTRACTOR under this Paragraph 16.03 shall be CONTRACTOR’s sole remedy in the event of termination for convenience by OWNER.

SC-17 Final Resolution of Dispute

Delete Paragraph 17.01 and replace it with the following:

SC-17.01 Methods and Procedures

A. Subject to the provisions of Paragraph 12.01, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

END OF SECTION
CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFER NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Insurance Agency

CONTACT NAME:
PHONE:
MAIL:
ADDRESS:
CUSTOMER ID #:

INSURED

Contractor

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A: Insurance Company
INSURER B:
INSURER C:
INSURER D:
INSURER E:
INSURER F:

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, LIMITATIONS, AND EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

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See SC-6.05

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

East Second Street to East Fifth Street Roadway and Water Main Improvements, Contract 1-2019, City of Lockport, Illinois

The City of Lockport and Strand Associates, Inc. are additional insured with respect to General Liability, Automobile Liability, and Excess/UMBRELLA Liability. The City of Lockport is an insured with respect to the Installation Floater policy. In addition, see attached Additional Insured Endorsements for the General Liability and Automobile policies.

CERTIFICATE HOLDER

City of Lockport
222 East Ninth Street
Lockport, IL 60441

Chamlin & Associates, Inc.
221 W. Washington St.
Morris, IL 60450

(CProvide separate certificate to each party.)

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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SPECIAL PROVISIONS
FOR
14TH STREET TO 18TH STREET WATER MAIN AND ROAD RECONSTRUCTION IMPROVEMENTS

CLARIFICATION OF CONTRACT DOCUMENTS

Any Bidder in doubt as to the true meaning of any part of the contract documents shall address all questions to the Engineer before the bid opening.

COMPLETION DATE AND PROGRESS OF WORK

The Contractor shall complete all contract work including punch list items by November 1, 2020. Notice of Award, or City Council Award, is anticipated to be given on January 15, 2020. Notice to Proceed is anticipated to be given on February 19, 2020.

The Contractor shall progress through the project in a diligent manner. Once work has begun on a particular area of the project (areas specified in project plan set), the Contractor shall continue to work on said area until proposed improvement is completed. At no time shall any area of the project, which has been disturbed, remain idle for a duration longer than five (5) consecutive days, except when required for curing times or as directed by the City.

LIQUIDATED DAMAGES

In addition to the requirements of Article 108.09 of the Standard Specifications, the following restrictions apply:

Time is of the essence for this contract. Contractor agrees if it does not achieve completion date by the date required, Owner will sustain damage with will be very difficult, if not impossible, to calculate and/or determine. Failure to complete work by the completion date of November 1, 2020 will result in payment by Contractor to Owner of liquidated damages in the amount of $2,000 per day.

SPECIFICATIONS

The following Special Provisions supplement the Standard Specifications for Road and Bridge Construction, adopted April 1, 2016. (Standard Specifications); the Supplemental Specifications and Recurring Special Provisions, adopted January 1, 2020; the latest edition of the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways; the Standard Specifications for Water and Sewer Construction in Illinois (Water and Sewer Specifications); and the City of Lockport Development Code Specifications. These Special Provisions included herein apply to and govern the proposed improvement designated as 14th Street to 18th Street Water Main and Road Reconstruction Improvements, and in case of conflict with any part or parts of said specifications, said Special Provisions shall take precedent and shall govern.

REJECTION OF BIDS

The City reserves the right to defer the award of the contract for a period not to exceed sixty (60) calendar days after the date bids are received, to accept or reject any and all proposals, to let the contract to any Bidder which the City in its sole discretion deems to be in the public interest and to waive technicalities.
CHANGE IN SCOPE OF WORK

The City reserves the right to make additions to or deductions from this Contract due to budgetary constraints. The contract unit prices provided by the Contractor shall be maintained and no additional compensation will be allowed to the Contractor for an increase or decrease in quantities and or anticipated profits.

EXTRA PAYMENT

No extra payment will be made for additional work performed due to wide trenches resulting from unforeseen or unanticipated sub-surface conditions. No extra payment will be made for hot-mix asphalt pavement removal and replacement or trench backfill other than quantities in the proposal unless length of watermain is added to the contract during the project.

If the proposed watermain location has to be relocated to avoid existing conflicts that would cause the proposed watermain to be installed in paved areas, then the only extra costs that will be considered for payment will be the additional hot-mix asphalt removal and replacement and trench backfill required. No other costs shall be considered for the additional excavation that will be required to be removed from the site to construct the watermain.

GUARANTEE

Upon final acceptance of the project, the Contractor will provide the Owner with a letter of guarantee for a period of one year (from date of acceptance) for all material and workmanship.

This guarantee shall include all improvements and the repair of any street, sidewalks, or driveways affected by the construction of the project improvements, except in cases where the defects are clearly not his fault. Should any defect arise within the guarantee period, the Contractor shall remedy said defect within 15 days after a written notice from the owner. If the Contractor fails to make repairs within 15 days, the Owner may make such repairs at the expense of the Contractor and may deduct all the cost thereof from any money belonging to the Contractor that may be in the control of the Owner and may hold the Contractor and his surety liable therefore.

SUB-CONTRACTING

In addition to the requirements of Article 108.01 of the Standard Specifications within ten (10) days after the Notice of Award of contract, the Contractor shall submit to the Engineer a list of all the sub-contractors that are to be performing or constructing any type of work in this Contract.

The list shall include the sub-contractor's name and address, and the type and amount of work to be performed by the sub-contractor.

PROGRESS SCHEDULE

The provisions of Article 108.02 of the Standard Specification should be modified to read as follows:

"The Contractor shall submit a Progress Schedule to the Engineer not more than ten (10) working days after the Notice of Award (City Council award) of the Contract. The Schedule shall be updated on a weekly basis and submitted to the Engineer by noon on Friday of each week. This schedule will show the order in which the Contractor proposes to carry on the work, the dates on which he will start controlling items, and the contemplated dates for completing controlling items. The Contractor's submission may be a critical path flow chart, bar graph or other
appropriate device of the Contractor's choice and shall clearly indicate the various types of work to be in progress at any point through the term of the Contract. The Progress Schedule shall show that each of the stages of the Contract will be substantially completed within the time provided in the Contract Documents. The Contractor will be required to include a statement regarding the number of days per week and the number of hours per day that he plans to work.

RECORD DRAWINGS

The Contractor shall keep one (1) record copy of all specifications, drawings, addenda, modifications, and shop drawings on site in good order and annotated to show all changes made during the construction process. These documents shall be kept current at all times and will be subject the Engineer’s review prior to approval of partial payments. These shall be available to the Engineer and shall be delivered to him for the Owner upon completion of the project. Final record drawings shall be provided in both CAD and PDF formats. The Contractor’s request for final payment will not be approved until said “Record Drawings” have been delivered to the Engineer.

PROTECTION OF EXISTING INFRASTRUCTURE

All construction activities shall be performed by Contractor in a manner that does not damage adjacent public or private property not scheduled for removal or replacement. No extra payment will be made by City for additional work performed due to damage to adjacent property.

MAINTENANCE OF EXISTING UTILITIES

The Contractor shall be responsible for interference with or damage to any existing utilities, such as water mains, sewers, gas mains, cable, conduit, etc., and shall repair or replace same at his own expense and with the least possible delay. The Contractor shall give prior notification to the utility companies of his intention to begin work. He shall also call J.U.L.I.E. at 1-800-892-0123 and the City to mark the location of underground utilities.

The Contractor shall note that all representation of existing utilities within the Contract Documents is for informational purposes only and shall not be construed as being the exact location of the existing utilities or a complete accounting of all possible existing utilities. The Contractor shall be responsible to avoid to the satisfaction of the Engineer, or repair and/or replace to the satisfaction of the utility owner and at his own expense all utilities that have been interfered with or damaged, regardless of the represented location or lack of representation within the Contract Documents.

UTILITIES

The Contractor shall be responsible for notifying all utilities prior to any excavation. Locations of utilities shown on these plans are approximate and shall be verified by the Contractor prior to any excavation. The location of the existing underground utilities as shown on the plans are based on the available evidence provided to the Engineer. There may be other existing underground utilities that are not shown on the plans. The Engineer does not guarantee that the locations as shown on the plans are accurate or that all the utilities are shown.

Protect from damage all existing sewer, water, gas, electric, or other services that are to remain. Any damage to utilities shall be repaired by this Contractor at no additional expenses to the Owner. Marking the locations of existing watermain will be performed, to the best of their ability, by the City Water Department. Prior notification and coordination with the Water Department is the responsibility of the Contractor. Locations provided by the City will be approximate, and the Contractor will be required to
verify locations provided. Any locations provided by the City, or if any lines are not located by the City, will not relieve the Contractor of his responsibilities to protect these lines. No additional payment will be made for repairs to the lines, or for down time waiting for locations or excavation to find the lines or mains. The ultimate responsibility for location of watermains will rest with the Contractor. Prospective bidders are urged to determine in advance what steps will be necessary in order to make arrangements for temporary or permanent relocation of existing underground utilities. The City will not be responsible for moving or causing to be moved any such utilities but rather provisions must be made for this work to be performed either by the Contractor or by the utility company involved. The City and or their Engineering representative will attempt to locate proposed watermains to avoid existing utility conflicts.

The proposed watermain shall be protected at all storm sewer crossings in accordance with these plans, the “Water and Sewer Main Specifications”, and at the direction of the Engineer.

In the event that the proposed watermain encroaches on the 18” vertical separation required for existing storm or sanitary sewers, the proposed watermain shall be placed in a PVC pipe casing as directed by the Engineer.

**VANDALISM**

Special attention is called to Article 107.30 of the Standard Specifications. Any defaced work shall be corrected or replaced by the Contractor at his sole expense prior to final payment. The City shall cooperate with the Contractor to minimize vandalism, but the Contractor shall be ultimately responsible to correct any damage.

**MAINTENANCE OF ROADWAYS**

Beginning on the date that the Contractor begins work on this project, he shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the City, but shall not include snow removal operations. Traffic control and protection for this work will be provided by the Contractor as required by the City.

The work involved in maintaining the existing pavement will not be paid for separately but shall be considered incidental to the various items of work involved, unless otherwise specified elsewhere in these Special Provisions. Traffic control and protection required for this work shall be included in the traffic control specification.

**STREET CLEANING**

Special attention shall be paid to Section 107.15 of the Standard Specifications. If the Contractor fails to clean the pavement, sidewalk or parkways on or adjacent to the section under construction to the satisfaction of the City at any time during the contract, the City will notify the Contractor at which time the Contractor will have 24 hours to respond. If the Contractor fails to respond within 24 hours an amount of $500.00 per incident will be deducted from any monies due the Contractor.

**SAW CUTTING**

All existing pavement, curb and gutter, driveway and sidewalk to be removed shall be sawcut at neat lines. All trenches in paved areas shall be sawcut. The concrete saw shall be equipped with a diamond blade of sufficient size to saw pavements full-depth and be capable of accurately maintaining cutting depth.
The cost of sawcutting shall be included in the bid price for each respective removal item and no additional compensation for this work shall be made.

**SIGN AND MAILBOX RELOCATE**

The Contractor shall remove and relocate all street signs and mailboxes located in or near the construction zone as directed by the City. The Contractor shall be responsible for replacing at his expense any signs damaged during the course of construction and the operation of removing and relocating any signs. The removal and relocation of all existing signs within the construction limits shall not be paid for separately but shall be incidental to the contract.

**HARDSCAPE AND LANDSCAPING REPAIR**

The Contractor shall remove, stockpile, and replace all hardscaped and decorative landscaped materials within the project limits, as directed by the Engineer. Hardscape and decorative landscape materials that conflict with proposed improvements shall be replaced to the extent possible. All pavers and landscape edging shall be neatly reset. All boulder, timbers, block, stone, pavers, and decorative items shall be either replaced or delivered back to the homeowner at the conclusion of the project. In the event the homeowner does not desire to keep this material, the materials shall be disposed of by the Contractor. The removal, stockpile, and replacement all existing hardscape and decorative landscape materials within the construction limits shall not be paid for separately but shall be incidental to the contract.

**PUBLIC CONVENIENCE AND SAFETY**

In addition to the requirements of Article 107.09 of the Standard Specifications, the Contractor shall maintain entrances and side roads along the proposed improvement; interference with traffic movements and inconvenience to owners of abutting property and public shall be kept to a minimum. Any delays or inconveniences caused by the Contractor by complying with these requirements shall be considered as incidental to the contract, and no additional compensation will be allowed.

The Contractor is to plan his work so that there will be no open holes in the pavement and that all barricades will be removed from the pavement during non-work hours. The contractor shall fill any trenches flush with the adjacent pavement each day. All trench backfill shall be paid according to the Special Provision for Trench Backfill excluding the top 8” of backfill required to bring the trench flush with the pavement. The top 8” of backfill shall be filled with temporary CA-6 aggregate. The temporary aggregate surface shall be maintained until the entire roadway is patched and resurfaced. The installation of the 8” of temporary aggregate will not be considered for payment but shall be included in the cost of the water main installation.

During all construction operations, the Contractor will be required to provide, erect and maintain proper signage and barricades plus provide flagmen as necessary for safe traffic control.

All provisions relating to traffic control, signage, barricades and the use of flagmen shall be subject to the approval of the City.

**DUST CONTROL**

When dust blowing from construction sites may become a traffic hazard or a danger to the health or comfort to persons downwind, it shall be controlled either permanently or temporarily depending upon the state of development of the site. Dust control measures shall be taken when required by the City.
Dust problems from active construction areas shall be kept under control by means of watering dry surfaces. Application and repetition rates shall be as necessary for effective control.

In the event of severe dust problems, the City may stop such dust producing activities until the problem is resolved.

This work shall not be paid for separately but shall be considered incidental to the watermain construction.

**EROSION CONTROL**

A. Erosion controls shall be installed as shown on the Drawings and as needed due to construction activities and at all storm water inlets.

Contractor as designated operator of activities at the construction site shall be responsible for compliance with all permit conditions. This includes, but is not limited to, the following:

1. Implement erosion and sediment control practices necessary to meet federal, state, and local performance standards.
2. Receive required approvals from Owner and regulatory agencies for any modifications to the erosion control plan necessitated by site conditions or Contractor’s operations.
3. Provide a “qualified” inspector to inspect erosion control and sediment controls. Inspector shall have prior experience with and knowledge of installation and maintenance of erosion and sediment controls. Inspector shall be identified to Owner.
4. Perform all inspection, maintenance, and record keeping activities required by the permit. This shall include inspecting erosion and sediment control facilities weekly and within 24 hours after a precipitation event of 0.5 inches or greater. Contractor shall maintain weekly written reports of all inspections.
5. Contractor shall respond within 24 hours to all corrective measures noted on the inspection report to address pollution issues.
6. Contractor shall submit to Owner a written notice stating the times, dates and actions taken to rectify the defective pollution and erosion controls.
7. Pay any fines or other fees resulting from failure of Contractor to comply with the permit requirements.
8. All disturbed areas not intended to be worked in for 14 days shall be temporarily stabilized within 7 days of the last activity.
9. Owner shall submit a “Notice of Termination” (NOT) to IEPA at end of the Project.

B. Contractor and its subcontractors shall execute and sign the following certification:

“I certify under penalty of law that I understand the terms and conditions of the General Pollutant Discharge Elimination System Permit that authorizes the storm water
discharges associated with industrial activities from the construction site and as may be
detailed in the Contract Documents. I agree to indemnify and hold Owner harmless from
any claims, demands, suits, causes of action, settlements, fines, or judgments and the
costs of litigation, including, but not limited to, reasonable attorney’s fees and costs of
investigation and arising from a condition, obligation or requirement assumed or to be
performed by Contractor for storm water pollution and erosion control.

Contractor or Contractor’s representative shall provide qualified personnel to inspect
disturbed areas of the construction site which have been not been final stabilized and
accepted, structural control measures, concrete washout areas, and locations where
vehicles enter and exit the site. Inspections shall be conducted at least once every 7 days
and within 24 hours of the end of a 0.5 inch, or greater, rainfall or equivalent snowfall
event.”

C. Contractor shall pay any fines or other fees resulting from failure of Contractor to comply
with the permit requirements.

D. Contractor shall comply with the Stormwater Pollution Prevention Plan (SWPPP).
Contractor must keep SWPPP document on site at all times and ready for review upon
request.

E. All petroleum products stored on site shall be stored in adequate containers. All fueling
sources shall have spill kits immediately available. All hazardous storage areas must be
placed in areas away from stormwater flow patterns and storm sewer basins and inlets.

F. Concrete trucks shall not be permitted to wash out or discharge surplus concrete or drum
wash water on the site. Specific areas for this activity shall be designated by Contractor
and provided with adequate siltation basins and other facilities to assure that discharge is
contained and cleansed before entering the site storm sewer system.

G. The management practices, controls and other provisions of the erosion control plan and
SWPPP shall be at least as protective as the requirements contained in the IEPA’s
Procedures and Standards for Urban Soil Erosion and Sedimentation Control, Illinois
Urban Manual, current edition and any governing local agency ordinances. Contractor is
responsible for the installation of any additional erosion control measures necessary to
prevent erosion and sedimentation as determined by the governing local agency.

H. The vegetative growth associated with temporary and permanent seeding, sodding,
vegetative channels, etc. shall be maintained periodically and supplied with adequate
water and fertilizer nutrients. If necessary, the vegetative cover shall be removed and
reseeded as needed.

I. Disturbed areas and areas used for storage of materials and equipment that are exposed to
precipitation shall be inspected for evidence of, or the potential for pollutants entering the
drainage system. Erosion and sedimentation control measures identified in the plan shall
be observed to assure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impact to receiving waters and adjacent properties. Locations where vehicles enter or leave the site shall be inspected for evidence of off site sediment tracking.

J. Based on the results of the inspection and description of potential pollutant sources identified the pollution prevention measures identified shall be revised as appropriated as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.

K. A report summarizing the scope of the inspection, names and qualifications of the personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and any actions taken based on the results of the inspections shall be made and retained as part of the plan for at least 3 years after the date of the inspections. The report shall be signed by Contractor’s designated “Qualified Individual” and copies forwarded to ENGINEER and Owner.

L. If any violation of the provisions of the storm water pollution prevention plan is identified during the course of the construction work, Contractor shall complete and file an “Incidence of Non compliance” (ION) report for the identified violation. Contractor shall use forms provided by the IEPA and shall include specific information on the cause of Non compliance, actions which were taken to prevent any further causes of Non compliance and a statement detailing any environmental impact which may have resulted from the Non compliance. All reports of Non compliance shall be signed by a responsible authority (Contractor) in accordance with the following General Permit. The Illinois Environmental Protection Agency, Division of Water Pollution Control, Attn: Compliance Assurance Section, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, IL 62794 9276. Contractor shall also notify the National Response Center at 800 424 8802 for reportable releases (send copies to Owner and ENGINEER).

M. Contractor shall implement Best Management Practices to reduce or eliminate pollution of storm water from stockpiles of soil and various other materials. Contractor shall consider the use of perimeter erosion barrier, temporary seeding, temporary mulch, plastic covers, soil binders, etc.

N. Contractor shall provide inlet protection at all existing inlets within the project area and also immediately downstream from the construction site. All inlet protection shall be type D conforming to Drawing 01-975-110A. Contractor shall provide all other erosion control measures necessary during the course of construction, including but not limited to, silt fence, clear stone tracking pads at construction entrances and exits, and cleaning of streets with mechanical sweeping at the end of each workday.
O. Contractor shall be responsible for taking measures to minimize the discharge of sediment laden waters into the lake and drainage ways; to protect completed work from erosion damage and to minimize debris, soil, stone, and other materials from entering the drainage system in accordance with Best Management Practices.

P. This Work shall not be paid for separately but shall be considered incidental to the work.

WATER SUPPLY AND USAGE

Construction water for the proposed improvements will be available to the Contractor at the City of Lockport Public Works Facility located at 17112 Prime Boulevard, Lockport, Illinois.

TEMPORARY WATER SHUTDOWNS

The City Water Department shall be notified at least two (2) working days in advance of any water shutdown. The City will determine what residences will be affected by the shutdown and supply to the Contractor shut-off notice handouts and those areas to be notified. The Contractor shall be responsible for distributing handouts to affected residences. The turning of any valve other than those installed but not yet accepted by the City shall be performed by water division personnel. Before the system is returned to service, a fire hydrant must be opened to relieve any air in the line and to flush the system. After the system is fully flushed, a representative from the City will collect chlorine residual and bacteriological samples. Another sample will be collected after 24 hours.

TRENCH PROTECTION

It shall be the Contractor’s responsibility to backfill the trench completely at the end of each work day. Only with written permission from the owner shall the Contractor leave any holes open at the end of the day. In those allowed instances the Contractor shall install an orange protective fencing around the portion of the trench that is left open. The fencing shall be secured in place by installing fence posts in at least four corners to support the fencing. The orange fencing shall be a minimum of 48” in height. The use of “Warning” tape or flagging instead of the orange protective fencing is not acceptable. This work shall be considered incidental to the contract unit price of the item being installed.

MATERIAL INSPECTION (QC/QA POLICY)

All hot mix asphalt and Portland Cement Concrete materials used on this project shall be tested and inspected in accordance with the Illinois Department of Transportation's QC/QA requirements and the IDOT Project Procedures Guide. The contractor shall provide QC services at no additional cost to the City.

The Contractor shall provide a request for QA testing to the Local Agency material inspection and testing provider by 4:00 p.m., 48 hours in advance of construction for inspection of all hot mix asphalt and concrete materials used on this project.

TREE PRUNING

This work shall consist of the care of existing plant materials by pruning trees in accordance with Article 201 of the Standard Specifications except as herein modified.
Tree pruning shall be performed in accordance with Article 201.06 of the Standard Specifications except that this work shall be performed as necessary and as directed by the Engineer regardless of date.

This work will NOT be measured for payment but shall be considered incidental to the cost of the adjacent pay item.

**TREE ROOT PRUNING**

**Description.** This work shall consist of the care of existing plant materials by root pruning, fertilizing, and watering existing trees to maintain the health and vigor during and following construction activity and shall be performed in accordance with Article 201 of the Standard Specifications except as herein modified.

Root pruning shall be performed in accordance with Article 201.06 of the Standard Specifications. This work shall be assumed to required five (5) applications of supplemental watering.

**Method of Measurement and Basis of Payment.** This work will be measured for payment in accordance with Article 201.10 and Article 201.11 except that all necessary fertilizers and supplemental watering shall be included in the cost.

**TRENCH BACKFILL**

**Description.** The provisions of Section 208 of the Standard Specifications shall be modified such that the material used for trench backfill shall be CA-7 coarse aggregate. The trench backfill shall be compacted only by Method 1 as defined in Article 550.07 of the Standard Specifications.

**Method of Measurement and Basis of Payment.** This work will be paid for at the contract unit price per Cubic Yard for TRENCH BACKFILL which price shall include all material, equipment, and labor necessary to place and compact the trench backfill as specified. The quantity of trench backfill for payment shall be determined by using the method of measurement as shown in the plans as the typical trench detail for water main and as defined in Article 208.03(b) of the Standard Specifications for pipes other than water main. The top 8” of any trench requiring trench backfill shall be backfilled with temporary CA-6 aggregate bringing the trench flush with the adjacent pavement. The installation of the 8” of temporary aggregate will not be considered for payment but shall be included in the cost of the water main installation.

**EXPLORATION TRENCH 72” DEPTH**

**Description.** This item shall consist of excavating a trench at the locations directed by the Engineer for the purpose of locating existing utility lines within the construction limits of the proposed improvement. This work shall conform to the requirements of Section 213 of the Standard Specifications except as herein modified.

The exploration trench shall be backfilled with trench backfill meeting the requirements of the Special Provisions, the cost of which shall be included in the item of Exploration Trench, of the depth specified.

An estimated length of exploration trench has been shown in the summary of quantities to establish a unit price only, and payment shall be based on the actual length of trench explored without a change in unit price because of adjustment in plan quantities.
Method of Measurement and Basis of Payment. This work shall be paid for at the contract unit price per Foot for EXPLORATION TRENCH 72” DEPTH, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work.

PARKWAY RESTORATION

Description. This work shall consist of the restoration of parkway following the completion of utility, concrete, and asphalt work.

Construction Requirements. The Contractor shall be responsible for restoring all of the areas disturbed in the parkway resulting from construction operations. This work shall be performed in accordance with Sections 211, 250, 251 of the Standard Specifications, and as modified herein. Parkway restoration shall be done as soon as possible after the completion of the adjacent work. It shall include good quality pulverized topsoil, fertilizer, sod, and watering, and provide all temporary seed & blanket, labor, materials and equipment, as necessary.

The Contractor shall clean all portions of the parkway that contain any type of debris, stone, paving asphalt or residue, concrete mix, forms, trash or materials of any kind remaining or resulting from the contract construction operations.

In cases where residents have installed private watering systems and underground dog fences in the parkway and behind the sidewalk, the Contractor shall use extreme caution. The Contractor shall be responsible for communicating with the residents, via a notice, of the parkway operations and any and all lawn watering systems must be located. Any damage to the system will be the responsibility of the Contractor and must be repaired and reported to the homeowner immediately. No additional compensation will be made to the Contractor for this notification and repair work.

Soil erosion and sediment shall be controlled by the placement of sod as soon as possible after the completion of the adjacent work. The Contractor shall provide temporary seed in compliance with the National Pollutant Discharge Elimination System Permit if the placement of sod cannot be promptly scheduled. The temporary seeding, removal, and redressing shall not be paid for separately, but considered incidental to the cost of sodding. Parkway restoration shall be conducted as soon as the adjacent work is completed and throughout the project schedule and will not wait until an entire area or until the entire project is completed.

Topsoil Placement:

The Contractor shall not use excavated material, or other spoils to backfill behind the new curb and gutter. All excavations behind any newly poured curb and gutter segments, driveway pavements, sidewalks, depressions or disturbed areas shall be backfilled with a good quality pulverized topsoil immediately to avoid a potential hazard. No additional compensation shall be made for the depth of the fill materials required at locations included under this contract.

This material shall be thoroughly compacted by the contractor in two uniform lifts when placed, by mechanical and/or hand tamping methods to the satisfaction of the Engineer so that this material will not consolidate and settle later on or present a safety hazard. It shall be neatly graded, struck level with the adjacent curb, sidewalk, driveway and/or parkway. Backfilling shall be completed within five (5) working days following the placement of the concrete curb, sidewalk, or driveway. Curb, sidewalk or driveway work will not be paid until backfilling is complete to the satisfaction of the Engineer.
Fertilizing, Temporary Seeding, Sodding, and Watering:

The area to be sodded shall be finished in accordance with Section 212 before sodding operations are begun. Parkway damage in excess of 4 feet beyond the adjacent work shall be the Contractors responsibility to repair and no additional compensation will be allowed.

Temporary seed and blanket shall be placed in parkway locations disturbed by construction as directed by the Engineer.

Immediately prior, but not in excess of 24 hours before the sod is placed, the soil surface shall be worked until it is relatively free from debris, washes, gullies, clods, weeds and stones, and is in a satisfactory condition. The surface shall be worked to a depth of 3” with pulverized topsoil added as necessary to provide a neat and uniformly graded sod bed which will match flush with adjacent lawn and other physical features, to the satisfaction of the Engineer. Prepared surfaces that become crusted shall be reworked to an acceptable condition for sodding.

Fertilizer shall be applied in accordance with Article 250.04 of the Standard Specifications.

Sodding shall be completed in accordance with Article 252 of the Standard Specifications.

Temporary seed and blanket shall be installed in accordance with Article 250 of the Standard Specifications.

Watering shall be performed in accordance with the Article 252.08 Supplemental watering shall be performed following the initial 30 day establishment period for every other day until area punchlist is complete or when directed by the Engineer. Water shall be applied at a rate specified by the Engineer within 24 hours of notice.

As directed by the Engineer, Contractor shall maintain seeded and sodded areas for the duration of the project until project close out. Maintenance shall consist of as needed mowing to maintain a maximum height of 3 inches, disposal of grass/weed clippings, and removal of weeds growing in areas disturbed by construction. Seed and sod maintenance will not be paid for separately but be considered incidental to the cost of sod and seed installation.

All landscape restoration shall be guaranteed by the Contractor for a period of one (1) year after completion of project. During this period all defective areas caused by inadequate watering, salt damage, pedestrian and traffic damage or other reasons, shall be repaired at the expense of the Contractor. Prior to project closeout, Contractor shall be responsible for distributing handouts for proper sod care, provided by City, to residences that will be maintaining sod installed as part of project.

**Method of Measurement.** Parkway Restoration will be measured for payment as follows:

Topsoil will be measured for payment in accordance with Article 211.07 of the Standard Specification.

Temporary seed and blanket will be measured for payment in place in square yards.

Sodding and Supplemental watering will be measured for payment in accordance with Article 252.12 of the Standard Specification.
Fertilizer will be measured for payment in accordance with Article 250.09 of the Standard Specifications.

**Basis of Payment.** Topsoil will be paid for at the contract unit price for per Square Yard for TOPSOIL FURNISH AND PLACE, 6”.

Sodding will be paid for at the contract unit price per Square Yard for SODDING, SALT TOLERANT in accordance with Article 252.13 of the Standard Specifications.

Supplemental watering will be paid for at the contract unit price per Unit for SUPPLEMENTAL WATERING.

Fertilizer will be paid for at the contract unit price per Pound for NITROGEN FERTILIZER NUTRIENT, PHOSPHORUS FERTILIZER NUTRIENT, and POTASSIM FERTILIZER NUTRIENT.

Temporary Seed & Blanket will be paid for at the contract unit price per Square Yard for TEMPORARY SEED & BLANKET.

**SLOPE RESTORATION**

**Description.** This work shall consist of the restoration of steep slope landscaped areas as indicated in the plans. The slope shall be restored as soon as soon as practical to prevent unnecessary erosion.

**Construction Requirements.** This work shall be performed in accordance with Sections 211, 250, 251 of the Standard Specifications, and as modified herein. Slope restoration shall be done as soon as possible after the completion of the adjacent work. It shall include geogrid, good quality pulverized topsoil, fertilizer, seeding, watering, labor, materials and equipment, as necessary.

The Contractor shall clean all portions of the slope that contain any type of debris, stone, paving asphalt or residue, concrete mix, forms, trash or materials of any kind remaining or resulting from the contract construction operations.

Soil erosion and sediment shall be controlled by the placement of seed as soon as possible after the completion of the adjacent work. The Contractor shall provide temporary seed in compliance with the National Pollutant Discharge Elimination System Permit if the placement of seed cannot be promptly scheduled. The temporary seeding removal, and redressing, shall not be paid for separately, but considered incidental to the cost of sodding. Slope restoration shall be conducted as soon as the adjacent work is completed and throughout the project schedule and will not wait until an entire area or until the entire project is completed.

Geogrid:

The Contractor shall install a geogrid system for the purpose of slope stabilization. The geogrid shall have a minimum cell depth of four inches. The geogrid may be manufactured using either HDPE or geosynthetic fabrics. The geogrid shall be installed in accordance with the manufacturer’s requirements for the application.

Topsoil Placement:

The Contractor shall not use excavated material, or other spoils to fill the geogrid. Geogrid shall be backfilled with a good quality pulverized topsoil immediately to avoid a potential hazard.
The topsoil shall be installed in accordance with the geogrid manufacturer’s requirements.

Seeding:

The slope restoration area shall be seeded with IDOT Class 5 and Class 3 seeding mixture and shall be in accordance with Section 250 of the standard specifications.

Fertilizing:

Fertilizer shall be applied in accordance with Article 250.04 of the Standard Specifications.

As directed by the Engineer, Contractor shall maintain seeded areas for the duration of the project until project close out. Maintenance shall consist of as needed mowing to maintain a maximum height of 3 inches, disposal of grass/weed clippings, and removal of weeds growing in areas disturbed by construction. Seed and sod maintenance will not be paid for separately but be considered incidental to the cost of seed installation.

All landscape restoration shall be guaranteed by the Contractor for a period of one (1) year after completion of project. During this period all defective areas caused by inadequate watering, salt damage, pedestrian and traffic damage or other reasons, shall be repaired at the expense of the Contractor.

Method of Measurement. Slope Restoration will be measured for payment in square yards of slope restored.

Basis of Payment. This work will be paid for at the contract unit price per square yard of SLOPE RESTORATION. This payment shall include all geogrid, topsoil, fertilizer, seeding, watering, labor, materials, and equipment necessary to install in accordance with the geogrid manufacturer’s requirements and this special provision.

INLET FILTERS

This item shall consist of furnishing, installing and maintaining inlet/catch basin protection at the locations shown on the plans or as directed by the Engineer to intercept water borne silt and prevent it from leaving the construction area and entering the drainage system. Work shall be performed in accordance with the applicable portions of Section 280 of the Standard Specifications, except as modified by this Special Provision.

Inlets and catch basins in roadway areas shall be protected by filter baskets placed between the frame and lid of the structure at the time of installing the open grate. Filter basket material shall be Type 3201.

Erosion control measures shall be inspected at least once a week and within 24 hours following any storm of 0.5 inches or greater rainfall, with any accumulations of silt removed from the site and any torn fabric replaced to the satisfaction of the Engineer.

Basis of Payment. This work shall be measured and paid for at the contract unit price per Each for INLET FILTERS, which prices shall include all labor, materials, and equipment necessary for installation and maintenance as specified.
AGGREGATE SUBGRADE IMPROVEMENT 12”

Add the following Section to the Standard Specifications:

“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement.

303.02 Materials. Materials shall be according to the following.

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<tr>
<th>Item</th>
<th>Article/Section</th>
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<tr>
<td>(a) Coarse Aggregate</td>
<td>1004.06</td>
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<td>(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2, and 3)</td>
<td>1031</td>
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</table>

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent of the total product. The top size of the RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01 or CS 02 are used in lower lifts. The RAP shall not be gap graded, single sized, or have a maximum size of less than 3/4 in. (19 mm).

Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Pavement (RAP) for Aggregate Applications”.

303.03 Equipment. The vibratory machine shall be according to Article 1101.01 or as approved by the Engineer.

303.04 Soil Preparation. The stability of the soil shall be according to the Department’s Subgrade Stability Manual for the aggregate thickness specified.

303.05 Placing Aggregate. The maximum nominal lift thickness of aggregate gradations CS 01 and CS 02 shall be 24 in. (600 mm).

303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 inches (75 mm) of aggregate gradations CA 06 or CA 10.

303.07 Compaction. All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

303.08 Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

303.09 Method of Measurement. This work will be measured for payment according to Article 311.08.
303.10 Basis of Payment. This work will be paid for at the contract unit price per Square Yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT 12”.

Add the following to Section 1004 of the Standard Specifications:

“1004.07 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

(c) Gradation.

(1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 inches (300 mm) shall be CS 02.

The coarse aggregate gradation for total subgrade thickness more than 12 inches (300 mm) shall be CS 01 or CS 02.

<table>
<thead>
<tr>
<th>Grad No.</th>
<th>Sieve Size and Percent Passing</th>
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<tr>
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<td>8”</td>
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<tr>
<td>CS 01</td>
<td>100</td>
</tr>
<tr>
<td>CS 02</td>
<td>100</td>
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</tbody>
</table>

(2) The 3 inch (75 mm) capping aggregate shall be gradation CA 6 or CA 10.”

TEMPORARY ACCESS

The Contractor shall maintain ingress and egress to all abutting properties during construction operations, except for times when concrete is curing. Driveways shall not be inaccessible for a period greater than 7 consecutive days or 10 total days during the construction project. If deemed necessary by the Engineer temporary driveway access ramps for driveways shall be constructed of cold millings or CA 6 stone. The Engineer shall identify each driveway that is to receive a temporary driveway access ramp. All temporary ramps shall be compacted to the satisfaction of the Engineer.

Maintenance of the ramps shall consist of placing and compacting additional millings or stone if deemed necessary by the Engineer.

After these ramps have served their purpose, the cold millings shall be removed and hauled off site at no additional charge.
Method of Measurement. This work shall be measured for payment per Each driveway or roadway where a Temporary Access (Private Entrance), Temporary Access (Commercial Entrance), or Temporary Access (Road) was constructed.

Basis of Payment. This work will be paid for at the contract unit price per Each for TEMPORARY ACCESS (PRIVATE ENTRANCE), TEMPORARY ACCESS (COMMERCIAL ENTRANCE), or TEMPORARY ACCESS (ROAD) for the installation specified which price shall include all material, equipment, and labor necessary to place, compact, and maintain each Temporary Access (Private Entrance), Temporary Access (Commercial Entrance), and Temporary Access (Road) installed. Each temporary access shall only be paid for one time and shall be maintained for the duration of the project or to such a time when the Engineer deems the ramps no longer necessary.

PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

Description. This work shall consist of placing Portland cement concrete sidewalk on a compacted subbase and shall be performed in accordance with the City of Lockport Standard Detail No. 70-7 and Sections 311 and 424 of the Standard Specifications with the following alterations.

Construction Requirements. Sidewalks shall be placed on 4-inches of Subbase Granular Material, Type B. Expansion joints shall be placed at intervals of not more than 200 feet. At driveway apron locations, the depth of concrete shall be increased to 6-inches. All required excavation shall be included. Sidewalks shall be doweled into existing adjacent sidewalk with 2 #4 rebar. Sidewalk spanning a trench shall have 2 continuous #4 rebar installed to a minimum of 10’ of each side of the trench.

Sidewalk ramps for the handicapped shall be installed at all intersecting streets and driveways in accordance with the City of Lockport Standard Detail No. 70-5 and IDOT Highway Standards 424001, 424006, 424011, 424016, and 424021 as directed by the Engineer.

Ramps and depressed curbs accessible to the handicapped shall be provided at all crosswalks and bicycle paths.

Detectable warnings shall be placed in sidewalk behind depressed concrete curb and gutter at all roadway crossings.

Six inch wide form boards must be used in construction.

Method of Measurement. Portland cement concrete sidewalk will be measured for payment in place, and the area computed in square feet.

Basis of Payment. This work will be paid for at the contract unit price per Square Foot for PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, which price shall include all required expansion joints, reinforcement, special texturing, variable height edge treatment at sidewalk ramps, additional thickness at driveway aprons, and compacted subbase granular material.

DETECTABLE WARNINGS

Description. This work shall consist of installing detectable warnings at locations directed by the Engineer.
**Materials.** The Contractor shall install an ADA tactile plate that is approved by IDOT. ADA tactile plates shall be cast iron or steel. The detectable warning shall be installed in accordance with the manufacturer’s recommendations and specifications as required by the Engineer.

**Construction Requirements.** Articles 424.08 – 424.12 of the Standard Specifications shall be replaced with the following:

424.08 Curb Ramps. Curb ramps shall be constructed according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG), the Illinois Accessibility Code, and as shown on the plans. Curb ramps shall be constructed to the same thickness as the adjacent sidewalk with a minimum thickness of 5 inches.

424.09 Detectable Warnings. The detectable warning shall be installed during the construction of the PCC sidewalk. The top of the tile shall be flush with the surface of the sidewalk. All PCC sidewalk and aggregate subbase installed below the detectable warning shall be considered included in the cost of Portland Cement Concrete Sidewalk 5 Inch. The detectable warning shall be installed according to the manufacturer’s specifications. The Contractor shall consult the City of Lockport for the desired color of each detectable warning tile to be installed.

The detectable warnings shall be installed at curb ramps, medians and pedestrian refuge islands, at-grade railroad crossings, transit platform edges, and other locations where pedestrians are required to cross a hazardous vehicular way. Detectable warnings shall also be installed at alleys and commercial entrances when permanent traffic control devices are present. The installation shall be an integral part of the walking surface and only the actual domes shall project above the walking surface. The product or method used for installing detectable warnings shall come with the following documents which shall be given to the Engineer prior to use.

A. **Product Data:** Submit manufacturer’s literature describing products, installation procedures and routine maintenance. Samples for Verification Purposes: Submit two (2) tile samples minimum 6”x6” of the kind proposed for use.

B. **Shop Drawings:** Shop drawings are required for products specified showing fabrication details, composite structural system, tile surface profile, fastener and anchor locations, plans of tile placement including joints, and material to be used as well as outlining installation materials and procedure.

C. **Material Test Reports:** Submit complete test reports from qualified accredited independent testing laboratories to qualify that materials proposed for use are in compliance with requirements and meet or exceed the properties indicated on the specifications. All tests shall be conducted on a Replaceable Cast In Place Detectable Tactile Warning Surface Tile system as certified by a qualified independent testing laboratory and be current within a 24 month period.

D. **Maintenance Instructions:** Submit copies of manufacturer’s specified installation and maintenance practices for each type of Detectable Warning Surface Tile and accessory as required.

E. **Manufacturer’s five year warranty.**

424.10 Backfill. After the concrete has been cured, the spaces along the edges of the sidewalk and ramps shall be backfilled with approved material. The material shall be compacted until firm and the surface neatly graded.

424.11 Disposal of Surplus Material. Surplus or waste material shall be disposed of according to Article 202.03.
Method of Measurement and Basis of Payment. This work will be measured and paid for at the contract unit price per Square Foot of DETECTABLE WARNINGS which price shall include all materials, labor, and equipment necessary to perform the work as shown in the construction detail and specified herein. The detectable warnings shall be measured for payment in place and the area shall be computed in square feet.

PAVEMENT REMOVAL

Description. This work shall consist of the complete removal of existing pavement and aggregate base course required to for the installation of proposed underground utilities.

Construction Requirements. This work shall be in accordance with Article 440.03 of the Standard Specifications, except that the nominal pavement removal thickness shall be considered to be 4” of hot mix asphalt and 8” of aggregate base course. Any variance in thickness shall be considered included in the cost of this work item.

Method of Measurement. This work will be measured as follows:

A. Contract Quantities. The requirement for use of contract quantities shall be according to Article 202.07(a).
B. Measured Quantities. Pavement removal will be measured for payment in place and the area computed in square yards. Removal of pavement outside the designated limits as shown on the plans or as directed by the Engineer will not be measured for payment.

Basis of Payment. This work will be paid for at the contract unit price per Square Yard for PAVEMENT REMOVAL.

CLASS D PATCHES, 6”

Description. This work shall consist of the removal of the existing pavement, the necessary excavation and the replacement with a hot mix asphalt patch.

Construction Requirements. This work shall be completed in accordance with Section 442 of the Standard Specification, except as altered herein.

The four types, namely Type I, Type II, Type III, and Type IV have been combined under this pay item Class D Patches, of the depth specified.

The backfill for all trenches associated with work in this contract shall be sufficiently compacted in accordance with the Trench Backfill, special provision.

Method of Measurement. Pavement removal and replacement of Class D Patches, 6” will be measured for payment in place and the area computed in square yards.

All saw cuts associated with the removal of pavement will not be measured for payment

All temporary granular material provided and maintenance of said material will not be measured for payment
**Basis of Payment.** This work will be paid for at the contract unit price per Square Yard for CLASS D PATCHES, 6”. All saw cuts and temporary granular material provided will not be paid for separately but shall be included in the cost of this item.

**STORM SEWERS, DIAMETER SPECIFIED C900 PVC**

This work shall conform to Section 550 of the Standard Specifications:

Storm Sewers, Diameter Specified, C900 PVC shall comply with Illinois Environmental Protection Agency, Division of Public Works Supplies “Technical Policy Statements” concerning Illinois Pollution Control Board Rules and Regulations, Chapter 6, Rule 212 E through F, the following materials are permitted for Storm Sewers, diameter specified, C900 PVC:

A. AWWA C900 PVC with push on joints (elastomeric gaskets) meeting ASTM 3139

This work shall be paid for at the contract unit price per Lineal Foot for STORM SEWERS, diameter specified C900 PVC.

**DIRECTIONAL BORED DUCTILE IRON WATERMAIN 8”**

**Description.** This Section covers trenchless pipe installation by means of directional boring and includes pipe, fittings, joining methods and general construction practice for Ductile Iron piping systems. This Work shall include all services, equipment, materials, and labor for the complete and proper installation, testing, restoration of underground utilities and environmental protection and restoration. This Work shall also include all components necessary to make connection to the Ductile Iron piping for the related water system components including water service reconnections, fire hydrants, and valves.


**Submittals.** Submit for Engineer's review material certification, product descriptions and catalog cut sheets, method of joining, and detailed description of directional boring plan. Pits required to perform the Work shall also be described in detail.

**Handling & Storage.** The manufacturer shall package the pipe in a manner designed to deliver the pipe to the project neatly, intact and without physical damage. Transportation methods shall insure the pipe is properly supported, stacked and restrained during transportation such that the pipe is not nicked, gouged, or physically damaged. Pipe shall be stored on clean, level ground to prevent undue scratching or gouging. If the pipe must be stacked for storage, such stacking shall be done in accordance with the pipe manufacturer’s recommendations. The pipe shall be handled in such a manner that it is not pulled over sharp objects or cut by chokers or lifting equipment. Sections of damaged pipe shall be removed.

**Products.**

A. Provide hydraulically or pneumatically operated, fluid-assisted, remote guided boring system capable of installing pipe indicated on the plans or as directed by the Engineer by trenchless methods.

1. Provide compressors, pumps, apparatus, tools and all devices certified as suitable by the system manufacturer to install the new pipe without damaging or stressing the pipe.
2. Provide recovery system that will recover bentonite slurries or other drilling fluids without releasing the slurry onto the surrounding ground or water surfaces.

B. Provide certification from pipe manufacturer that the proposed material and strength classification is appropriate for application.

Construction Requirements. Restained Joint Ductile Iron pipe meeting the requirements as specified in the Ductile Iron Water Main Specifications. The Contractor shall verify that specified material will be of sufficient material pull strength for the Directional Boring equipment to be used.

Execution.
A. Drill Path Survey and Potholing - shall be provided by the Contractor to locate existing service lines and utilities prior to installing water main through that segment. All such exploratory excavations shall minimize disturbance to the surface and the existing utilities. The Contractor shall properly dispose of all material removed and shall be disposed of off-site. When paralleling other utilities within five (5) feet, potholing may be required along the utility every twenty-five (25) feet. The entire drill path shall be accurately surveyed with entry and exit stakes placed in the appropriate locations. If Contractor is using magnetic guidance system, drill path will be surveyed for any surface magnetic variations or anomalies.

B. Directional Boring: Directional boring shall be performed by experienced and qualified personnel with specialized equipment utilizing steerable tunneling systems capable of creating a bore hole and then pulling the utility back through the bore hole. A slurry shall be used to stabilize the walls of bore hole as required and to reduce frictional drag on the piping being installed.

C. Pipe & Fittings: Size as indicated as shown on the plans or as directed by the Engineer. Install as shown and in accordance with manufacturer’s recommendations. Installed piping shall be hydrostatically pressure tested at 150% of the rated working pressure of the pipe for not less than 2 hours.

Installation and Testing.
A. Pipe Installation:

1. Install pipe by direction boring methods. Install ductile iron pipe by pulling the pipe into place.
   a. Provide winch systems designed to protect structures, provide directional stability, and pull pipe from insertion point to exit point without causing damage to the pipe being inserted.
   b. Insert pipe in a continuous operation from point to point.
   c. Provide lubricants as specified by pipe manufacturer to avoid stressing of pipe beyond its elastic limit during insertion.
   d. Provide silencers, mufflers, or other devices required to reduce noise from compressors and other equipment to meet limits as outlined by City’s local ordinances.

2. Provide pipe insertion pits necessary for complete installation of pipe.
   a. In general, position pits at the end of the pipe specified for directional boring in the least disruptive location whenever possible.
   b. Provide additional pits as required to install new pipe.
c. Provide all traffic control, barricades, flagmen, and other items at insertion pit areas as necessary to complete the work.
d. Provide tight sheeting at insertion pits to keep pit to the minimum size necessary to do the work. Remove sheeting when work is completed.

3. Pipe installed within steel casing pipe, whether casing pipe is installed by augering or open cut, shall comply with the applicable provisions as shown on the Drawings.

B. **Testing.** Pressure testing shall be conducted in accordance with the manufacturer's recommended procedure. Pressure testing shall use water as the test media. Pneumatic (air) testing is prohibited.

**Televising.**
A. **Sanitary Sewer Services.** In areas where directional bored ductile iron water main is installed, the Contractor shall televised all sanitary sewer services from the main to the ROW limits. In the event a conflict between the directional bored ductile iron water main and the sanitary sewer service has occurred, the Contractor shall be responsible for removing and reinstalling the sanitary sewer service at no additional cost to the Owner. Cleaning and televising shall comply with the appropriate portions of these Special Provisions.

**Method of Measurement.** Measurement for Directional Boring and Ductile Iron Piping and accessories as shown on the Drawings and as specified in this Section shall be made per linear foot for various sizes of Ductile Iron pipe installed by means of directional boring.

**Basis of Payment.**
A. Payment for the Work specified in this Section will be made at the contract unit price per Foot DIRECTIONAL BORED DUCTILE IRON WATERMAIN 8” and measured in place.

B. The price for installation and receiving pits shall be considered incidental to the price of the bored pipe. The cost for mobilization and demobilization of directional boring equipment together with all plant, labor, equipment, and material as necessary to install and remove the boring equipment, provide access to the site, maintain site drainage, provide dust abatement, provide construction utilities, construct, protect and fill installation and receiving pits, clean up the site, and all incidentals necessary to complete the Work, as specified and as shown on the Drawings shall be included in the unit price bid for the listed Item.

C. These prices shall be full compensation for furnishing, and installing all materials and for all labor, equipment, tools, and incidentals necessary to complete the Items. Payment for pipe joining, fittings, thrust block/anchors and all components necessary for the installation shall be included in the prices bid for those items to which they pertain.

D. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain.

**DUCTILE IRON WATERMAIN – OF DIAMETER SPECIFIED**

This item shall be constructed in accordance with the City of Lockport Standard Detail No. 60-7 and with the applicable portions of Section 41 of the Water and Sewer Specifications except as modified herein.
The water main and fittings shall be ductile cast iron, cement lined, with push-on joints, Class 52, of the size as designated in the plans, and shall conform to the latest ANSI/AWWA C151/A21.51-86, C111 and C104.

Wherever water is encountered in the trench, it shall be removed during pipe laying and jointing operations. Provisions shall be made to prevent floating of the pipe. Any dewatering of the trenches shall be considered incidental. At no time shall trench water be allowed to enter the water main. Water main shall be installed to provide a minimum of 5.5’ of cover.

All types of pipe shall be handled in such a manner as to prevent damage to the pipe or coating. Accidental damage to the pipe or coating shall be repaired to the satisfaction of the Engineer, or be removed from the job, and the methods of handling shall be corrected to prevent further damage when called to the attention of the Contractor.

The pipe shall be inspected by the Engineer for defects while suspended above grade.

Dirt or other foreign material shall be prevented from entering the pipe or pipe joint during handling or laying operations, and any pipe or fitting that has been installed with dirt or foreign material therein shall be removed, cleaned and re-laid. At times when pipe laying is not in progress, the open ends of the pipe shall be closed by a watertight plug, or by other means subject to the review of the Engineer, to ensure absolute cleanliness inside the pipe. All cutting of existing water main pipe for the insertion of valves, tees or other fittings shall be performed without damage to the pipe or pipe lining, and so as to leave a smooth end at right angles to the axis of the pipe. Any damaged water main shall be re-cut and replaced by the Contractor at his sole expense.

Ductile iron pipe, pipe fittings, and valve bodies, as well as cast iron valve boxes, shall be wrapped with polyethylene film, a minimum of 8 mils in thickness. The entire wrap on any pipe or fitting shall have a single seam secured by waterproof tape. Polyethylene shall overlap a minimum of 24 inches at seams. The wrap shall enclose the entire pipe or fitting and shall be secured to the adjoining pipe barrel by waterproof tape tightened securely around the juncture of the wrap and the pipe barrel. The Contractor shall re-wrap the water main at all service tap locations. All polyethylene wrapped ductile iron pipe, pipe fittings and valve bodies shall be inspected by the Engineer.

A canvas strap shall be used to lower the water main into the trench to avoid damaging the polyethylene film.

The first two joints beyond any bend or valve shall be restrained with retainer glands. Also, any joint where the proposed water main ties into the existing water main shall be restrained with retainer glands. Retainer glands shall be Mega Lugs by EBAA Iron, or an equal approved by the Engineer. Also all bends, crosses, and tees shall be additionally restrained with thrust blocks as shown on the details in the plans. The cost of retainer glands and thrust blocks shall be considered included in the cost of the ductile iron water main.

**Basis of Payment.** This work will be paid for at the contract unit price per Foot for DUCTILE IRON WATERMAIN, of the diameter specified, measured in place. This price shall include the cost of all pipe, joint materials, retainer glands, thrust blocks, hydrostatic pressure tests, leakage tests, disinfecting of the water main, excavation, and polyethylene wrapping. Excavation and backfill, with the exception of surface removal items listed specifically in the schedule of prices and trench backfill as required, will not be measured for payment but shall be considered as incidental to the contract unit price per Linear Foot of ductile iron pipe water main of the class and size specified. Granular Cradle (CA-7) from four inches (4") below the bottom of the pipe to twelve inches (12") above the top of the pipe will not be measured for
payment but shall be considered as incidental to contract unit price per Linear Foot or ductile iron pipe water main of the class and size specified. Fittings such as tees, bends, reducers and plugs shall be considered incidental to the contract unit price per Linear Foot of Ductile Iron Pipe Water Main of the class and size specified.

This item shall also include any and all items such as corporation stops (for testing), water pumps, gauges, meters and laboratory test costs, and all other items necessary to complete this work as specified. The item shall also include the installation and removal of the 8" of temporary aggregate capping the water main trench.

PRESSURE TESTING OF WATER MAINS

After the pipe has been laid and partially backfilled as specified herein, all newly-laid pipe valved sections and fire hydrants, unless otherwise expressly specified, be subjected to a hydrostatic pressure of 150 psi at the lowest elevation of the pipe section. The Engineer shall be given 24 hours’ notice prior to the beginning of testing. The duration of each pressure test shall be not less than two hours. Water main testing shall be in accordance with the applicable portions of AWWA Standards C600 and C603, or as otherwise modified herein.

Procedure for Test - The Contractor shall notify the Owner at least twenty-four hours prior to the pressure test. Valves will be turned on only under the supervision of the Owner, and the Owner will witness all pressure testing.

Each section of pipe to be tested, as determined by the Engineer, shall be slowly filled with water and the specified test pressure shall be applied by means of a pump connected to the pipe in a satisfactory manner. The pump pipe connection and all necessary apparatus, including gauges and meters, shall be furnished by the Contractor. Before applying the specified test pressure, all air shall be expelled from the pipe. To accomplish this, taps shall be made, if necessary, at points of highest elevations and afterwards tightly plugged. Any cracked or defective pipes, fittings, valves, or hydrants discovered in consequence of this pressure test shall be removed and replaced by the Contractor with sound material, and test shall be repeated until satisfactory to the Engineer and the Owner. The provisions of AWWA C600 and C603, where applicable, shall apply.

The pressure testing shall be accomplished with fire hydrant auxiliary valves open.

Leakage Test: After completion of the pressure test, a leakage test shall be conducted to determine the quantity of water lost by leakage under the specified test pressure.

A. Test pressure is defined as the maximum operating pressure of the section under test, and is based on the elevation of the lowest point in the line or section under test corrected to the elevation of the test gauge. Applicable provisions of AWWA C600 and C603 shall apply. The minimum duration of each leakage test shall be one (1) hour in addition to the pressure test period.

B. Allowable leakage in gallons per hour for cast iron water main shall not be greater than that determined by the following formula:

\[ L = \frac{ND}{7400} \sqrt{P} \]

Note: \( L \) = Allowable leakage in gallons per hour
\( N \) = Number of joints in length of pipeline tested.
D = Nominal diameter of the pipe in inches.
P = Average test pressure during leakage test in pounds per square inch gauge.

C. Leakage is defined as the quantity of water to be supplied in the newly laid pipe or any valved section under test, which is necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled.

Immediately after a passed test the pressure shall be drained through a fire hydrant until it is below the potable system pressure.

**DISINFECTION OF WATER MAINS**

Disinfection of water mains shall be completed in accordance with Section 41-2.14 of the Water and Sewer Specifications except as modified in this Special Provision.

The Owner shall be notified at least twenty-four hours before the disinfection procedure. Representatives of the water division must be present during the procedure.

A. Flushing

Sections of pipe to be disinfected shall first be flushed to remove any solids or contaminated material that may have become lodged in the pipe. If no hydrant is installed at the end of the main, then a tap should be provided large enough to develop a velocity of at least two and five-tenths (2.5) feet per second in the main. One two and one-half (2 1/2) inch hydrant opening will, under normal pressures, provide this velocity in pipe sized up to and including twelve (12) inches.

All taps required for chlorination or flushing purposes, or for temporary or permanent release of air, shall be provided for by the Contractor as part of the construction of water mains.

B. Requirement of Chlorine

A free chlorine residual of at least 50 ppm and no more than 400 ppm must be reached throughout the entire length and branch lines of the water main. After the super-chlorinated water has sat in the main for twenty-four hours, a chlorine residual test shall be taken to insure the residual has not dropped by over one-half.

C. Form of Applied Chlorine

Chlorine shall be applied by the method which follows, subject to the review of the Engineer.

Chlorination shall be made by the use of chlorine gas only. The dry gas shall be fed directly through proper devices for regulating the rate of flow and providing effective diffusion of the gas into the water within the pipe being treated. Chlorinating devices for feeding the chlorine gas must provide means for preventing the backflow of water into the chlorine. The chlorine gas shall be injected into the main at intervals of no more than 1,000 feet.

D. Point of Application

The preferred point of application of the chlorine gas is at the beginning of the pipe line extension or any valved section of it, and through a corporation stop inserted in the pipe. The water injector for delivering the chlorine-bearing water into the pipe should be supplied from a tap made on the
pressure side of the gate valve controlling the flow into the pipe line extension. Alternate points of application may be used subject to the review of the Engineer.

E. Preventing Reverse Flow

Valves shall be manipulated so that the strong chlorine solution in the line being treated will not flow back into the line supplying the water. Check valves may be used if desired.

F. Retention Period

Treated water shall be retained in the pipe at least twenty-four (24) hours. After this period, the chlorine residual at pipe extremities and at other representative points shall be at least twenty-five (25) mg/l.

G. Chlorinating Valves and Hydrants

In the process of chlorinating newly laid pipe, all valves or other appurtenances shall be operated while the pipe line is filled with the chlorinating agent and under normal operating pressure.

H. Final Flushing and Testing

Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipe at its extremity until the replacement water throughout its entire length shows, upon test, a chlorine residual of less than one (1) mg/l. In the event chlorine is normally used in the source of supply, then the test shall show a residual of not in excess of that carried in the system.

At this time a water sample will be taken by the Contractor or his representative and sent to a state-certified water lab of his choice. Also at this time the Owner will witness the sampling. The Contractor shall take two (2) samples, 24 hours apart with satisfactory results or the procedure shall be repeated. After satisfactory sample results are obtained, an operating permit shall be obtained from the Illinois Environmental Protection Agency. No service line installation shall be performed until the approved operating permit is received.

I. Repetition of Flushing and Testing

Should the initial treatment result in an unsatisfactory bacterial test, the original chlorination procedure shall be repeated by the Contractor until satisfactory results are obtained. After water main passes chlorination testing, the corporation stop used to chlorinate the main shall be shut off and any piping removed.

**WATER VALVES – OF SIZE SPECIFIED**

Water valves shall be of the gate valve type suitable for ordinary water-works service, intended to be installed in a normal position on buried pipe lines for water distribution systems.

As a minimum, all gate valves shall, in design, material and workmanship, conform to the standards of the latest AWWA C500 and AWWA C509. All materials used in the manufacture of waterworks gate valves shall conform to the AWWA standards designed for each material listed.
Materials

A. All materials shall be in conformance with the City of Lockport Standard Detail No. 60-4

B. Type and Mounting - The valve bodies shall be cast iron, mounted with approved non-corrosive metals. All wearing surfaces shall be bronze or other approved non-corrosive material and there shall be no moving bearing or contact surfaces of iron in contact with iron. Contact surfaces shall be machined and finished in the best workmanlike manner, and all wearing surfaces shall be easily renewable. All trim bolts shall be 300 series stainless steel.

The resilient-seated disc wedge shall be of the resilient wedge fully-supported type. Solid guide lugs shall travel within channels in the body of the valve. The disc and guide lugs shall be fully (100%) encapsulated in SBR (styrene butadiene) rubber.

Disc wedges that are not 100% fully encapsulated shall not be not be acceptable. Guide caps of an acetal copolymer bearing material shall be provided to protect the rubber-encapsulated solid guide lugs from abrasion for long life and ease of operation.

All internal and external exposed ferrous surfaces of the valve shall be coated with a fusion-bonded, thermosetting powder epoxy coating conforming to AWWA C550 and certified to NSF 61. Coating shall be non-toxic and shall impart no taste to water. Coating thickness shall be nominal 10 mils.

The stem shall be of high tensile strength bronze or other approved non-corrosive metal, providing 70,000 PSI tensile strength with 15% elongation and a yield strength of 30,000 PSI. All nonferrous bushings shall be of substantial thickness, tightly fitted and pressed into machine seats. All valves shall open by turning to the left (counterclockwise), unless otherwise specified.

C. End Connections - End connections of gate valves shall consist of Push On (Rubber-gasket) Joints.

All gate valves are to be installed in concrete valve vaults as detailed in the plans. The valves shall be wrapped with polyethylene film, as specified in the Special Provision for Ductile Iron Water Main, included elsewhere herein.

This work will be paid for at the contract unit price per Each for WATER VALVES, of the size specified. This price shall include the cost of all labor, materials and equipment necessary to install the gate valve in a valve vault, including polyethylene wrapping, as detailed in the plans and to the satisfaction of the Engineer. The valve vault will be paid for separately.

WATER MAIN FITTINGS

This work shall consist of furnishings and installing all tees, bends, crosses, reducers and retainer glands necessary to complete the water main installation as shown on the plans.

All fittings shall be ductile iron, mechanical joint in accordance with AWSI/AWWA C153/A21.53 and ANSI/AWWA C111/A 21.11. Fittings shall be cement-lined and seal coated in accordance with ANSI/AWWA C104/A21.4. The working pressure rating shall be 350 psi. All joints between the water main pipe and fitting shall be restrained using Mega Lugs by EBAA Iron or an approved equal. Bolts and nuts on all fittings shall be A-304 stainless steel bolts and series 300 stainless steel nuts and washers per ASTM A194, Corten, or equivalent.
Testing and disinfecting of fittings shall be as specified elsewhere herein.

This work will not be paid for separately but shall be included in the contract unit price per Linear Foot of ductile iron pipe water main of the class and size specified which price shall be payment in full for all labor, equipment, and material, testing and disinfecting, to complete the work as specified herein.

**WATER MAIN PRESSURE CONNECTION – OF SIZE SPECIFIED**

A pressure connection to the existing watermain shall be made without shutting down the existing watermain. This pressure connection shall be made by means of a tapping sleeve and tapping valve and shall be in accordance with the City of Lockport Standard Detail No. 60-3.

Tapping valves shall be provided with a flanged end for attachment to the flange of the tapping sleeve and with a mechanical joint end that is suitable for attachment of a drilling machine. With the exception of valve ends and oversized seat rings to permit entry of the drilling machine cutters, the tapping valve shall be of the resilient wedge, gate valve type as previously specified in the Special Provision for Water Valves.

Each tapping sleeve and valve assembly shall be furnished and installed complete with gaskets, nuts/bolts and appurtenances all as required for the sleeve and flanged connection between the sleeve and valve. Tapping valves shall be included in the cost of the Water Main Pressure Connection.

This work will be paid for at the contract unit price per Each for WATER MAIN PRESSURE CONNECTION, of the size specified.

**CUT-IN CONNECTION**

**Description.** This work shall consist of the furnishing of all labor, tools, and equipment necessary to effect a connection of a new water main to the existing water main. This work shall include taking the existing water main out of service and cutting, capping and abandoning the existing water main as shown on the plans.

**Installation.** All materials shall be on hand before work is undertaken to insure that a minimum of time is necessary to complete the work required on the plans. Only Water Department Personnel will be in charge of closing system valves, but the Contractor shall lend any assistance necessary to expedite the shutdown. In addition, when deemed necessary to pass out notices of a system shutdown by the Engineer, the Contractor shall distribute notice door to door as directed by the Engineer. If the City is not available to shut the water off, at the direction of the Engineer, it shall be the contractor’s option to shut the water off with their own forces. The contractor shall make no claims for additional payment due to delays caused by the time required to shut down existing water mains.

Once water service has been shut down, the Contractor shall cut the existing water main, remove pipe as necessary to accommodate connection to the new main. Contractor shall then complete the water main connection and abandon and plug/cap and block the existing water main as shown on the plans. All mechanical joints shall be MegaLug or approved equal. Abandonment of water main shall be as specified elsewhere for Water Main Removal.

The Contractor shall be required to furnish any and all pipe fittings, required jointing materials, and all work necessary to complete the connection as specified. This includes but not limited to any necessary plugs, blocks, corporation stops, sleeves, mechanical joints, reducers and water main pipe. All fittings
and pipe that are installed under this item shall be placed on a granular bedding a minimum of six inches (6”) in thickness. Pipe fittings shall not be paid for separately but shall be included in the cost of the work as specified. In addition, whenever a connection is made and a portion of the existing system will not be subject to the chlorination procedure for the new main, the Contractor shall provide tablet disinfection procedures as described in Section 41-2.15C (3) of the Water and Sewer Standard Specifications. All other items required for restoration (i.e. pavement patches, sodding, etc.) will be paid for under the specific pay item in the contract. After the connection has been made, a visual inspection shall be made for leaks under system pressure, irrespective of the pressure test that may be required under other provisions in the contract. If no visual leaks are detected, the excavation shall be backfilled with materials as directed by the City.

**Method of Measurement and Basis of Payment.** The work shall be measured and paid for at the contract unit price per Each for CUT-IN CONNECTION, which price shall be payment in full for all services, materials, labor and other items to complete the work as specified, including granular bedding, granular backfill and all pipe/pipe fittings necessary to complete the work. When the connection occurs on a line perpendicular to the proposed water main this shall be considered one Cut-In Connection and not two separate connections.

**WATER MAIN CASING**

**Description.** This work shall consist of furnishings and installing water main casing pipe at locations designated on the plans or as directed by the Engineer.

The casing pipe shall be of sufficient size to freely accept and pass the proposed water main but shall not be less than 2 times the diameter of the water main it is to encase. The casing pipe shall be constructed of PVC (SDR 26). The ends of the casing shall be sealed with cement grout.

**Measurement and Payment.** This work will be paid for at the contract unit price per foot of Water Main Casing, which price shall include all labor, materials, and equipment necessary to complete this work.

**WATER SERVICE**

**Description.** This item shall consist of furnishing and installing new Type K copper 1” water service lines from the new corporation stop to the location of the new curb stop as noted in the plans or as directed by the Engineer, in accordance the City of Lockport Standard Detail No. 60-8. The method of installation of the Water Service Line 1”, Long or Water Service Line 1”, Short shall be the discretion of the Contractor.

**Construction Requirements.** The existing service lines are 1” or ¾” of varying material. The Contractor shall provide the proper couplings between copper and the varying material.

Water Service, Long shall be defined as any water service in which it is required to cross the adjacent roadway pavement in order to install a Domestic Water Service Box or reconnect and existing water service.

The method of installation of the Water Service, Long shall be at the discretion of the Contractor. If an open cut method of installation is used, traffic shall be maintained at all time. Additionally, all trench backfill and all temporary pavement or aggregates to maintain traffic on the roadway will be included in the cost of Water Service, Long.
Water Service, Short shall be defined as any water service in which does not required the crossing of an adjacent roadway pavement in order to install a Domestic Water Service Box or reconnect and existing water service.

The method of installation of the Water Service, Short shall be the discretion of the contractor.

Method of Measurement and Basis of Payment. This work shall be paid for at the contract unit price per Each for WATER SERVICE, 1” of the type specified. All excavation, couplings, new 1” copper water service line, auguring, excavation, backfilling including trench backfill, connections to the existing service line and new main, capping of any abandoned water service line, removal of existing water service box, and corporation stop will not be paid separately but shall be included in the contract unit price per Each for Water Service, of the type specified.

CORPORATION STOPS

Description. This work shall consist of furnishing and installing corporation stops for new water service lines tapping to new and existing water mains, in accordance with Section 562 of the Standard Specifications and Section 41-2.13 of the Water and Sewer Specifications.

Materials. The corporation stops shall be a model as specified in City of Lockport Standard Detail No. 60-8.

Measurement and Payment. This work shall not be paid for separately but shall be included in the corresponding Water Service pay item. This shall be considered payment in full for all labor, equipment, and material required to complete the work as specified herein.

DOMESTIC WATER SERVICE BOXES TO BE REMOVED

This work shall consist of the removal of existing curb boxes and curb stops at the locations indicated on the plans or directed by the Engineer. The material and equipment shall be removed in a manner which will not cause damage until they are picked up by City forces. If the City does not want the water service boxes, the contractor shall remove and dispose of them at the expense of the contractor with no additional compensation.

The existing water service line which is connected to an existing water main designated to be abandoned may be removed or abandoned in place. The removed water service lines shall become the property of the Contractor.

This work will not be paid for separately but shall be included in the cost of the corresponding Water Service Line 1” pay item. This shall be payment in full for all labor, equipment, and material to complete the work as specified herein.

DOMESTIC WATER SERVICE BOX

Description. This work shall consist of the furnishing and installation of a curb stop, curb box and all required appurtenances to install and connect to the existing water service.

Construction Requirements. All domestic water services boxes and curb stops shall be of a model as specified in the City of Lockport Standard Detail No. 60-8.

All curb stops shall be provided with “dog dish” concrete block.
The cast iron service box shall be installed over the curb stop and held in a truly vertical position until sufficient backfill has been placed to ensure permanent vertical alignment of the box. The top of the box shall be adjusted and set flush with the established ground surface grade.

**Measurement and Payment.** This work will not be paid for separately but shall be included in the cost of the corresponding Water Service Line 1” pay item.

**ADJUSTING SANITARY SEWERS, 8-INCH DIAMETER OR LESS**

**Description:** This work shall consist of adjusting a sanitary sewers or services to avoid a potential utility conflict. All sanitary sewer services shall connect to the existing sanitary sewer main and be constructed to the limits of the proposed sewer or water main conflict at which point a sanitary sewer clean out shall be installed. Sanitary sewer shall be constructed to a point where the existing sewer is of sound condition and suitable for connection.

**Materials:** Sanitary sewer pipe and fittings shall be PVC, SDR 26, having a minimum cell classification of 12454 per ASTM D1784 and meeting the requirements of ASTM D3034. The pipe joints and fittings shall be elastomeric seals meeting the requirements of ASTM D3212 and F 477. If required, connections to existing sanitary sewer main shall be made with a stainless steel tapping saddle. All sanitary sewer services shall be six (6) inches in diameter.

**Construction:** Installation of sanitary sewer service shall be accomplished to line and grade in the trench only after it has been dewatered and the foundation and/or bedding has been prepared in accordance with Section 20 of the Standard Specifications for Water and Sewer Construction in Illinois. Mud, silt, gravel and other foreign material shall be kept out of the pipe and off the jointing surface. All pipe laid shall be retained in position so as to maintain alignment and joint closure until sufficient backfill has been completed to adequately hold the pipe in place. All pipe shall be laid to conform to the prescribed line and grade specified.

The pipe bedding shall be a minimum of four (4) inches in depth and shall be placed on a sound trench bottom. If unsuitable material is encountered in the trench bottom, the Contractor shall remove the unsuitable material until suitable material is encountered or as directed by the Engineer. All unsuitable material removed shall be replaced with the bedding material.

After the pipe has been laid to the specified line and grade, the Contractor shall place haunching material on each side of the installed pipe to a level equal to the spring line of the pipe. The Contractor shall verify that the pipe is adequately supported for the entire length of the installed pipe. Following the haunching of the pipe, the initial backfill shall be placed to a depth that is a minimum of 12 inches above the top of the installed pipe.

The bedding, haunching, and initial backfill material shall have a gradation that meets the minimum requirements of IDOT gradation CA-7.

Upon completion of the initial backfill, the remainder of the trench shall be backfilled to the natural line of finished surface as rapidly as the conditions will permit. The backfill material for trenches where the inner edge of the trench is within five (5) feet or in existing pavements, curb, gutter, or sidewalks shall meet the requirements of the Trench Backfill, Special Provision provided in these specifications.

All fittings shall be factory produced and shall be designed for installation on the pipe used. Fittings shall be of the same quality and material as the pipe used.
The maximum deflection permissible at any one (1) fitting shall not exceed 45 degrees. The maximum deflection of any combination of two adjacent fittings shall not exceed 45 degrees unless straight pipe of not less than two and one half (2-1/2) feet in length be installed between such adjacent fittings.

Sanitary sewer services connections shall be made to existing sewer main tees. If there is not and existing tee or if the orientation of the tee is such that a new tee is required to provide the proper separation, the connection shall be made by machine made tap and a stainless steel tapping saddle. This work shall be considered incidental to the sanitary sewer adjustment.

Measurement and Payment: This work will be paid for at the contract unit price per Foot for ADJUSTING SANITARY SEWERS, 8-INCH DIAMETER OR LESS which price shall include all pipe, fittings, excavation, removal and disposal of all excavated material, bedding, haunching and trench backfill materials, tapping saddles, sewer clean out, traffic rated clean out cover (if necessary), and machine made taps.

WATER MAIN REMOVAL

Description. This work shall consist of the removal of portions of the existing water main and capping of the portions that are to remain in place. This work shall be performed at locations shown on the plans and/or subject to the review of the Engineer.

Construction Requirements. Excavation required for water main removal shall be performed in accordance with the applicable portion of the Special Provision Ductile Iron Water Main included herein. Water main removal shall end either at a joint or at a location where the existing pipe has been saw cut so as to provide a smooth, even surface so as to allow a watertight joint. After removal of the existing pipe, the integrity of that portion which is to remain in place shall be checked to insure that the pipe end has not been damaged. Additional removal required by non-compliance with this Special Provision will be performed at the Contractor’s expense and no additional compensation will be allowed. The existing water main shall be capped at all locations where removal is specified. The valves that control the existing water distribution system may not be adequate to completely shut down the system and the Contractor should expect some residual pressure to be present when the mechanical cap is installed.

If the excavation required for the removal operation falls within a paved area (existing or proposed), it shall be backfilled with selected granular backfill. This work shall be performed in accordance with the applicable requirements of the Special Provision Trench Backfill included herein. Trench Backfill will not be measured for payment but shall be considered incidental to the contract unit price per Lineal Foot for water main removal.

Method of Measurement and Basis of Payment. This work will be paid for at the contract unit price per Lineal Foot for WATER MAIN REMOVAL, regardless of diameter, measured as removed. This price shall include excavation, capping of existing water mains that remain in place, and backfill as herein specified.

FIRE HYDRANTS TO BE REMOVED

Description. This work shall consist of the removal of existing fire hydrants, including auxiliary valves, and plugging and blocking of abandoned water main at the tee as indicated on the plans or required by the Engineer. The existing fire hydrants are not to be removed until after the new fire hydrants have been installed and satisfactorily tested. The fire hydrants to be removed shall become the property of the Owner and shall be delivered to the Public Works Facility. The Contractor is to bag any existing or new fire hydrants that are not in use.
Measurement and Payment. This work will be paid for at the contract unit price per Each for FIRE HYDRANTS TO BE REMOVED, which price shall be payment in full for all labor, caps/plugs, equipment, and material necessary to complete the work as specified herein.

FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

Description. This work shall consist of furnishing new fire hydrants of the type and size specified on the City of Lockport Standard Detail No. 60-1 and as specified herein at the locations indicated on the plans or otherwise directed by the Engineer.

Materials. All materials shall be in accordance with the City of Lockport Standard Detail No. 60-1.

Installation. Hydrants shall be set at the locations indicated on the plans, and shall be such length that with the frost ring nearly at the ground level, there will be five and one-half feet (5.5’) of cover over the connecting pipe and the height of the nut on the cap is 30” minimum above the ground. At least four feet (4’) of cover will be provided across ditches. Hydrants shall be placed on poured concrete slab ready mix 3500 psi (or approved equal), and shall have a minimum of one-half cubic yard (1/2 cy.) of gravel or porous stone around the base to provide drainage for the hydrant drip. This shall include a 3-4 mil. plastic barrier, between the gravel drain field and the earth cover. All hydrants shall be properly braced to prevent movement. Any mechanical joint glands required on any mechanical joint fittings necessary for the installation of the hydrants shall be retainer-type glands. All hydrants shall be placed so that the steamer connection is facing the existing roadway. The contractor shall grease all hydrants (including breakaway, upper stem, ports and any other parts per EJIW recommendations) post installation. In addition, all hydrants shall be sanded and painted POST installation.

Basis of Payment. This work will be paid for at the contract unit price per Each for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX, which price for all work as specified herein, and shall include the six inch (6”) diameter pipe between the auxiliary valve and the water main.

VALVE VAULTS, TYPE A, TYPE 1 FRAME, CLOSED LID – OF DIAMETER SPECIFIED

Description. This work shall consist of constructing valve vaults for water mains and water services in accordance with Section 44 of the latest edition of the “Standard Specifications for Water and Sewer Main Construction in Illinois” and Section 602 of the Standard Specifications.

In addition to the requirements of Sections 44 – 2.02 and 44 – 3.01 and 602, valve vaults shall be constructed in accordance with the City’s Standard Detail No. 60-4. All lids for valve vaults shall have the words “WATER” cast into them.

Measurement and Payment. This work will be paid for at the contract unit price per Each for VALVE VAULTS, TYPE A, TYPE 1 FRAME, CLOSED LID, of the diameter specified, which price shall include all materials, labor and equipment required to complete the work as specified.

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

Description. This work shall consist of constructing combination concrete curb and gutter in accordance with the Section 606 of the Standard Specifications and the City of Lockport Standard Detail No. 70-2, except as modified herein

Materials. The materials for this work shall be in accordance with article 606.02 of the Standard Specifications.
Construction Requirements. This work shall be constructed in accordance with Section 606 of the Standard Specifications, except as modified as follows:

The combination concrete curb and gutter shall be constructed on a minimum of four (4) inches of crushed aggregate base course. This base course shall extend a minimum of 6” behind the back of curb.

Two (2) continuous #4 reinforcement bars shall be installed in the curb and gutter as depicted in the City of Lockport Detail No. 70-2.

All combination concrete curb and gutter that is constructed with the use of form work shall have a form on the front and back of the combination concrete curb and gutter. The Contractor will not be allowed to “bank” pour the curb and gutter against the existing pavement structure.

The annular space between the front of the curb and the existing pavement shall be filled with concrete in a second operation after the concrete curb has sufficiently cured. The surface of this concrete shall be struck smooth to a level that is equal to the milled surface of the adjacent existing pavement.

Method of Measurement. This work will be measured for payment in feet in accordance with Section 606.14. All crushed aggregate subbase, dowel bars, reinforcement bars, and concrete used to fill the annular space between the front of the curb and existing pavement will not be measured for payment separately.

Basis of Payment. This work will be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12. This price shall include all material, labor, and equipment necessary to construct the curb as shown on in the plan details and as described herein.

TRAFFIC CONTROL AND PROTECTION

701.01 Description. This work shall be performed in accordance with Section 701 of the Standard Specifications, and any Highway Standards contained herein with the following clarifications.

Special attention is called to Articles 107.09 and 107.14 and the following Highway Standards relating to traffic control:

701101 Off-Rd Operations, Multilane, 4.5 m (15’) to 600 mm (24”) From Pavement Edge
701301 Lane Closure, 2L, 2W, Short Time Operations
701501 Urban Lane Closure 2-lane, 2-way, Undivided
701801 Urban Lane Closure Crosswalk or Sidewalk Closure
701901 Traffic Control Devices

701.04 General. Add the following:

The Contractor shall make frequent inspections of the worksite. Any traffic control items that are worn, damaged or are inoperative to the extent that they no longer meet these specifications or that have been displaced shall be repaired or removed and replaced. Traffic control items shall be properly installed and operational 24 hours-a-day, 7 days a week. The Contractor shall respond to requests from the City to correct traffic control deficiencies within 4 hours of the request. If specification is not met within 4 hours
of notice, the City will take whatever action it may deem necessary to bring the traffic control within specification and deduct all costs (actual and incurred) from amounts due the Contractor.

The Contractor shall maintain at least one lane of traffic for local and emergency use at all times. Entrances to driveways and side roads shall also be maintained as indicated in the special provision for Temporary Access (Private Entrance), or Temporary Access (Road), as the case may be.

All signs except those referring to daily lane closures shall be post mounted in accordance with Standard 702001.

Temporary Stop signs shall be included in the cost of this item and not paid for separately.

**701.19 Method of Measurement.** Add the following: No compensation for any delays that may be caused the Contractor in complying with this special provision shall be made.

**701.20 Basis of Payment.** This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, less monies deducted for non-compliance with Section 701.

**TRAFFIC CONTROL DEFICIENCY DEDUCTION**

To ensure a prompt response to incidents involving the integrity of the work zone traffic control devices, the Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis. When the Engineer is notified or determines a deficiency exists, (s)he shall be the sole judge as to whether the deficiency is an immediate safety hazard. The Contractor shall dispatch sufficient resources within 4 hours of notification to make needed corrections of deficiencies that constitute an immediate safety hazard. Other deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, the Contractor will not be paid for that day of Traffic Control and Protection. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies and the cost thereof will be deducted from monies due or which may become due to the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

**DRIVEWAY PAVEMENT**

**Description.** This work shall consist of the replacement of HMA or PCC or Aggregate driveway pavements in part or in their entirety, at locations shown on the plans or as directed by the Engineer, and the construction of new HMA or PCC driveway pavement. This work shall be performed in accordance the City of Lockport Standard Detail No. 70-15 and with Sections 301, 351, 406, and 423 of the “Standard Specifications for Road and Bridge Construction,” the details shown on the plans and as directed by the Engineer.

**Construction Requirements.**

The Contractor shall place and compact embankment, or excavate, in accordance with Sections 202 and 205 of the Standard Specifications in order to achieve the finished grades shown on the plans.

The proposed driveway pavement shall consist of:

A. 6” Portland Cement Concrete Driveway Pavement, and 3” of Aggregate Base Course, Type B
B. 3” HMA Driveway Pavement and 6” of Aggregate Base Course, Type B.
All Aggregate Base Course, reinforcement, and PCC or HMA Driveway pavement will not be paid for separately but shall be included in this pay item.

**Method of Measurement and Basis of Payment.** This work will be measured and paid for at the contract unit price per Square Yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6 INCH, HMA DRIVEWAY PAVEMENT 3 INCH, which price shall be payment in full for constructing this item as specified, including all aggregate base materials, reinforcement, surface course materials, labor, and equipment.

**CONSTRUCTION LAYOUT**

The Contractor shall be required to furnish and place construction layout stakes for this project. The Engineer will provide adequate reference points to the centerline of survey and benchmarks as shown in the plans and listed herein. Any additional control points set by the Engineer will be identified in the field to the Contractor and all field notes will be kept in the office of the Engineer.

The Contractor shall provide field forces, equipment and material to set all additional stakes for this project, which are needed to establish offset stakes, reference points, and any other horizontal or vertical controls, including supplementary benchmarks, necessary to secure a correct layout of the work. Stakes for line and grade shall be set at sufficient station intervals (not to exceed 15 m (50 ft.)) to assure substantial conformance to plan line and grade. The Contractor will not be required to set additional stakes to locate a utility line which is not included as a pay item in the contract nor to determine property lines between private properties.

The Contractor shall be responsible for having the finished work substantially conform to the lines, grades, elevations and dimensions called for in the plans. Any inspection of checking of the Contractor’s layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimension, grades and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and benchmarks and shall have them reset at his/her expense when any are damaged, lost, displaced or removed or otherwise obliterated.

**Responsibility of the Engineer**

A. The Engineer will locate and reference the centerline of all roads and streets except interchange ramps. The centerline of private entrances and short street intersection returns will not be located or referenced by the Engineer.

   Locating and referencing the centerline of survey will consists of establishing and referencing the control points of the centerline of surveys such as PC’s, PT’s and as many POT’s as are necessary to provide a line of sight.

B. Benchmarks will be established along the project outside of the construction lines not exceeding 300 m (1,000 ft.) intervals horizontally and 6 m (20 ft.) vertically.

C. Stakes set for (a) and (b) above will be identified in the field to the Contractor.

D. The Engineer will make random checks of the Contractor’s staking to determine if the work is in substantial conformance with the plans. Where the Contractor’s work will tie into work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment.
E. The Engineer will set all stakes for utility adjustment for building fences along the right of way line by parties other than the Contractor.

F. The Engineer will make all arrangements and take all cross sections from which the various pay items are to be measured.

G. Where the Contractor, in setting construction stakes, discovers discrepancies, the Engineer will check to determine their nature and make whatever revisions are necessary in the plans, including the re-cross sectioning of the area involved. Any additional restaking required by the Engineer will be the responsibility of the Contractor. The additional restaking done by the Contractor will be paid for in accordance with 109.04 of the Standard Specifications.

H. The Engineer will accept responsibility for the accuracy of the initial control points as provided herein.

I. It is not the responsibility of the Engineer, except as provided herein, to check the correctness of the Contractor’s stakes; however, any errors that are apparent will be immediately called to the Contractor’s attention and s/he shall be required to make the necessary correction before the stakes are used for construction purposes.

J. Where the plan quantities for excavation are to be used as the final pay quantities, the Engineer will make sufficient checks to determine if the work has been completed in substantial conformance with the plan cross sections.

Responsibility of the Contractor

A. The Contractor shall establish from the given survey points and benchmarks all the control points necessary to construct the individual project elements. S(he) shall provide the Engineer adequate control in close proximity to each individual element to allow adequate checking of construction operations. This includes, but is not limited to, line and grade stakes, line and grade nails in form work, and/or filed or etched marks in substantially completed construction work.

It is the Contractor’s responsibility to tie in centerline control points in order to preserve them during construction operations.

B. At the completion of the grading operations, the Contractor will be required to set stakes at 30 m (100 ft.) station intervals along each profile grade line. These stakes will be used for final cross sectioning by the Engineer.

C. All work shall be in accordance with normally accepted self-checking surveying practices. Field notes shall be kept in standard survey field notebooks and those books shall become the property of the Engineer at the completion of the project. All notes shall be neat, orderly and in accepted form.

D. For highway structure staking, the Contractor shall use diligent care and appropriate accuracy. Points shall be positioned to allow reuse throughout the construction accuracy. Prior to the beginning of construction activities, all structure centerlines and pier lines are to be established by the Contractor and checked by the Engineer. The Contractor shall provide a detailed structure layout showing span dimensions, staking lines and offset distances.
Measurement and Payment: This work will be paid for at the contract lump sum price for CONSTRUCTION LAYOUT, which shall be payment in full for all labor, materials, transportation, and incidentals necessary to furnish, install, maintain, replace, and relocate all control and stationing points for the duration of the project.

STRUCTURES TO BE ADJUSTED

Description. This work shall consist of the adjusting of catch basins, manholes, inlets, valve vaults, or valve boxes. The term Structure shall be understood to be equivalent to the terms of Catch Basins, Manholes, Inlets, Valve Vaults and Valve Boxes.

Construction Requirements. This work shall be completed in accordance with the City of Lockport Standard Detail No. 30-6 and Section 602 of the Standard Specification.

Basis of Payment. This work will be paid for at the contract unit price per Each for STRUCTURES TO BE ADJUSTED, which price shall include all material, labor, and equipment necessary to perform this work.

STRUCTURES TO BE ADJUSTED WITH NEW FRAME AND GRATE

Description. This work shall consist of the adjusting of catch basins, manholes, inlets, valve vaults, or valve boxes. The existing frame shall be removed and replaced with a similar frame as approved by the Engineer. The term Structure shall be understood to be equivalent to the terms of Catch Basins, Manholes, Inlets, and Valve Vaults.

Construction Requirements. This work shall be completed in accordance the with City of Lockport Standard Detail No. 30-6 and Section 602 of the Standard Specification.

Basis of Payment. This work will be paid for at the contract unit price per Each for STRUCTURES TO BE ADJUSTED WITH NEW FRAME AND GRATE, which price shall include all material, labor, and equipment necessary to perform this work.

SANITARY STRUCTURES TO BE ADJUSTED

Description. This work shall consist of the adjustment of existing sanitary sewers frames to the required line and grade as shown on the plans or as directed by the Engineer.

Construction Requirements. This work shall be done in accordance with Section 602 of the Standard Specifications and shall consist of the adjustment of sanitary manholes and furnishing and installing a new type 1 frame, closed lid. Non-hardening butyl rubber mastic sealant; minimum thickness 1/4 inch, shall be used between adjusting rings in place of mortar, or as required by the Owner of the Sanitary Sewer. In locations where existing external frame seals exist, it shall be removed and disposed of and an internal/external frame seal shall be installed. In locations where internal frame seals exist, it shall be removed and disposed of and an internal/external frame seal shall be installed. In locations where there are no existing frame seals, an internal/external frame seal shall be installed. The installation of the internal/external frame seal will not be paid for separately and will be considered incidental to this pay item.

The Internal/External Frame seal shall consist of the following:

A. Provide frame seals consisting of a flexible internal rubber sleeve, rubber ring, and
external rubber sleeve and extension, and stainless steel compression bands.

B. Rubber sleeve, ring, butyl tape, and extension:
   1. Provide rubber sleeve and extension complying with ASTM D412 and ASTM D2240.
   2. Provide rubber ring complying with ASTM D2240.
   3. Provide butyl tape: Comply with 1000% minimum webbing @ 77 degrees F, 500% minimum elongation @ 32 degrees F, and maximum 75 psi compressibility @ 77 degrees F.
   4. Provide sleeve with a minimum thickness of 0.062" and unexpanded external vertical heights of 10 to 12 inches.
   5. Provide extension having a minimum thickness of 0.062".
   6. Comply with a minimum 1500 psi tensile strength, maximum 18 percent compression set and a hardness (durameter) of 48±5.

C. Compression band:
   1. Provide compression band to compress the sleeve against the manhole.
   2. Use 16 gauge stainless steel conforming to ASTM A240 Type 304 with no welded attachments and having a minimum width of 1/2-inch.
   3. Make a watertight seal having a minimum adjustment range of 2 diameter inches.
   4. Provide stainless steel screws, bolts, and nuts conforming to ASTM F593 and 594, Type 304.

D. Acceptable products:
   1. Adaptor, Inc. Internal/External Adaptor Seal.
   2. Or equal.

E. Or as required by the Owner of the sanitary sewer system.

The Internal/External Frame Seal shall be installed as follows:

A. Install internal/external rubber gasket on the manhole chimney.
   1. Provide watertight gasket to eliminate leakage between the internal/external frame seal and the adjusting ring and between each adjusting ring down to and including cone section.

B. Clean surface and prepare the lower 2 inches of the manhole frame and exterior of all adjusting rings and cone section/corbel surfaces.

C. Install internal rubber gasket in accordance with manufacturer's recommendations.
   1. Field verify for suitable dimensions and layout before installation.
   2. Realign frame as required.

D. Repair and apply mortar grout to the adjusting rings as required to provide a smooth, circular surface for the external rubber gasket.

E. Install external rubber gasket in accordance with manufacturer's recommendations.
   1. Field verify for suitable dimensions and layout before installation.
   2. Utilize sealing caulk where required.
   3. Provide chimney seal extensions as required.

F. Test installation by flooding area around the manhole with water before backfiling and surface restoration.
   1. Gaskets are required to provide watertight seal at openings between the frame and adjusting rings and between adjacent adjusting rings down to the cone/corbel section.

G. Reinstall and retest failing gaskets at no additional cost to Owner.

H. Or as required by the Owner of the sanitary sewer system.
**Basis of Payment.** This work will be paid for at the contract unit price per each of SANITARY STRUCTURES TO BE ADJUSTED, which price shall include all of the above.

**STRUCTURES TO BE RECONSTRUCTED**

**Description.** This work shall consist of the adjusting of catch basins, manholes, inlets, valve vaults, or valve boxes. The term Structure shall be understood to be equivalent to the terms of Catch Basins, Manholes, Inlets, Valve Vaults and Valve Boxes.

**Construction Requirements.** This work shall be completed in accordance with Section 602 of the Standard Specification.

**Basis of Payment.** This work will be paid for at the contract unit price per each for STRUCTURES TO BE RECONSTRUCTED, which price shall include all material, labor, and equipment necessary to perform this work.

**SANITARY STRUCTURES TO BE RECONSTRUCTED**

**Description.** This work shall consist of the reconstruction of sanitary manholes.

**Construction Requirements.** This work shall be completed in accordance with Section 602 of the Standard Specification except that the reconstructed manhole shall be provided with an internal/external frame seal meeting the requirements of the Sanitary Structures to be Adjusted special provision.

**Basis of Payment.** This work will be paid for at the contract unit price per each for SANITARY STRUCTURES TO BE RECONSTRUCTED, which price shall include all material, labor, and equipment necessary to perform this work.

**STRUCTURES TO BE REMOVED**

**Description.** This work shall consist of the removal of catch basins, manholes, inlets, valve vaults, or valve boxes. The term Structure shall be understood to be equivalent to the terms of Catch Basins, Manholes, Inlets, Valve Vaults and Valve Boxes.

**Construction Requirements.** This work shall be completed in accordance with Section 602 of the Standard Specification.

**Basis of Payment.** This work will be paid for at the contract unit price per each for STRUCTURES TO BE REMOVED, which price shall include all material, labor, and equipment necessary to perform this work.

**TREE, 2” CALIPER, BALLED AND BURLAPPED**

**Description.** This work shall consist of planting balled and burlapped trees in accordance with the following special provision and as indicated on the plans.

**Construction Requirements.** All trees shall have normal, well-developed branches, vigorous root systems, and well defined central leader. All trees shall be nursery grown and shall have been growing under the same climatic conditions as the location of the project for at least one year to date of planting on this project. Trees that have been held in storage will be rejected if they show signs of growth during storage.
Trees shall be 2” caliper minimum and shall be delivered balled and burlapped. They shall be dug with firm, natural balls of earth sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the “American Standard for Nursery Stock” ANSI Z60.1. Cracked or mushroomed balls are not acceptable. Balls shall be firmly wrapped with burlap or similar materials and bound with twine, cord or wire mesh. Where necessary to prevent breaking or cracking of the ball during the process of planting, the ball may be secured to a platform. Balled and platformed plants shall be securely tied with a stout rope to sturdy platforms equal in size to the upper diameter of the upper half of the ball of earth.

Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds. Provide pits at least 24 inches greater than the diameter of the root system. Depth of pit shall accommodate the root system. Scarify the bottom of the pit to a depth of 4 inches. The planting hole shall not have glazed sides. Holes dug with a mechanical device such as an auger shall be roughed up to eliminate any glazing.

Center the root ball in the plant pit on undisturbed subsoil. Backfill the plant hole with planting soil placed in layers around the root ball. Carefully tamp each layer in place in a manner to avoid injury to the roots and ball. When approximately two thirds of the plant hole has been backfilled, fill the hole with water and allow the soil to settle around the roots. The top of the ball shall be 1 to 2 inches higher than the surrounding grade. Extreme care should be taken to not excavate to a depth that exceeds the height of the root ball. Backfilling the hole to raise the height of the tree is not acceptable. Once the ball is set into the hole, remove from the ball as much rope, burlap, and wire as possible to prevent girdling of the roots. Remove all tree wrap.

Pruning shall be done in such a manner as to remove all dead and severely injured branches and not to change the shape of the plant. Tree branches are to be pruned to leave the branch collar intact. No pruning wounds shall be present with a diameter of more than 1 inch, and such wounds must show vigorous bark on all edges. On cuts 3/4” diameter and bruises or scars on the bark, trace the injured cambium back to living tissue and remove. Damaged bark is to be removed very carefully to avoid opening new wounds on the tree. Only the damaged bark is to be removed. Do not apply tree paint to the wound.

Plants with multiple leaders shall be pruned to preserve the leader which will best promote the symmetry of the plant. Cut branches flush with the trunk or main branch, at a point beyond a lateral shoot or bud a distance of not less than 1/2 the diameter of the supporting branch. The cut should be made on an angle.

All trees shall be secured in two directions 180 degrees apart with a wide strap material secured to tree cage. The tree shall be staked to allow some play in the trunk.

The trees furnished shall be at least the minimum size indicated. Larger stock is acceptable, but no additional compensation will be made to the Contractor for the larger size. The Contractor shall provide specimen plants with special height, shape, or character of growth. Tag specimen trees at the source of supply. The Engineer may observe specimen selections at the source of supply for suitability and adaptability to selected location. When specimen plants cannot be purchased locally, provide sufficient photographs of the proposed specimen tree for review.

Plants may be observed at the place of growth for compliance with specification requirements for quality, size, and variety.
Contractor shall take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an “Antidesiccant” immediately after digging to prevent dehydration. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock and on arrival, the certificate shall be filed with the Engineer. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to Engineer. Water heeled-in planting daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches.

The Contractor shall cover plants transported on open vehicles with a protective covering to prevent wind burn.

The Contractor shall provide dry, loose topsoil for planting. Frozen or muddy topsoil will not be accepted. The topsoil shall be fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, plants roots, sticks, substances harmful to the plants, and other foreign materials, with acidity range of between pH 6.0 and 6.8. The source location of topsoil proposed for use on the project should be identified prior to delivery.

All water used for planting of the plants shall be free of substances harmful to plant growth.

The Engineer shall be notified at least 7 working days prior to installation of plant material.

The Contractor shall maintain plantings for a period of at least 60 days after completion of planting operations until all plants are sufficiently recovered from transplanting and in a healthy growing condition acceptable to Engineer. Maintain plantings installed in the fall after September 15 until May 30 of the following year. The Contractor shall replace all plantings that are not fully leafed and thriving by July 31, 2021. The replacement of these plantings will be at the sole cost of the Contractor.

The Contractor shall provide plants typical of their species or variety complying with ANSI Z60.1; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound healthy, vigorous plants free from defects, disfigured knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces. Plants held in storage will be rejected if they show signs of growth during storage.

Type and location of the trees shall be agreed upon by the Engineer in the field. The Contractor may supply any tree on the following list, except that no one variety of a can exceed 20 percent of the total number of trees planted.

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<thead>
<tr>
<th>Approved Trees</th>
<th>Overhead Utilities Present</th>
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<tbody>
<tr>
<td>No Overhead Utilities Present</td>
<td>Overhead Utilities Present</td>
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<tr>
<td>Sugar Maple</td>
<td>Hedge Maple</td>
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<tr>
<td>European Black Alder</td>
<td>Tartarian Maple</td>
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<tr>
<td>Hackberry</td>
<td>Purple Blow Maple</td>
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<tr>
<td>European Beech</td>
<td>American Hornbeam</td>
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<tr>
<td>Copper Leaf Beech</td>
<td>Winter King Hawthorn</td>
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<tr>
<td>Ginko (Male Only)</td>
<td>Amur Maackia</td>
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<tr>
<td>Honey Locust (Thornless &amp; Seedless)</td>
<td>Hop hornbeam</td>
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</tbody>
</table>
| Kentucky Coffee Tree (Seedless Male)                | American Smoke Tree
<table>
<thead>
<tr>
<th>European Larch</th>
<th>Overhead Utilities Present</th>
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<tbody>
<tr>
<td>Northern Red Oak</td>
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<td>Burr Oak</td>
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<td>English Oak</td>
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<td>Linden</td>
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<td>Horsechestnut</td>
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<td>Sweet Gum</td>
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<td>Kwanzan Cherry</td>
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<td>Sargent Cherry</td>
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<td>Hybrid American Elm</td>
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<td>Norway Maple</td>
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<td>Red Maple</td>
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</tbody>
</table>

**Method of Measurement and Basis of Payment.** This work will be paid for at the contract unit price per each for TREE, 2” CALIPER, BALLED AND BURLAPPED. This price shall include all equipment, labor, materials for a complete installation as specified.

**PRECONSTRUCTION VIDEOTAPING**

**Description.** This work shall consist of furnishing all materials and labor required to perform a videotape survey of the construction limits, adjacent right-of-way, and adjacent structures bordering the Work. This shall include, but not be limited to, existing buildings, garages, pavements, curb and gutter, sidewalks, fences, trees, and landscaping. Two copies of the videotape shall be furnished to Owner in DVD format. Videotaping shall be performed by a company acceptable to Owner in the presence of Owner’s and shall be performed prior to the commencement of construction. The videotape survey shall serve as a basis for establishing damage that has occurred as a result of construction operations.

**Basis of Payment.** This work will be paid for at the contract Lump Sum price for PRECONSTRUCTION VIDEOTAPING, which price shall be payment in full for the work specified herein.

**CONSTRUCTION AND DEMOLITION DEBRIS**

Add the following to the third paragraph of Article 202.03 of the Standard Specifications:

“The Contractor shall not conduct any generation, transportation, or recycling of construction or demolition debris, clean or general or uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads that is not commingled with any waste, without the maintenance of documentation identifying the hauler, generator, place of origin of the debris or soil, the weight or volume of the debris or soil, and the location, owner, and operator of the facility where the debris or soil was transferred, disposed, recycled or treated. This documentation must be maintained by the Contractor for 3 years.

All removal or excavation items being disposed of at an uncontaminated soil fill operation or Clean Construction and Demolition Debris (CCDD) fill site shall meet the requirements of Public Act 96-1416. All Costs associated with meeting these requirements shall be included in the unit price for the associated items in the contract that require removal and disposal of CCDD and uncontaminated soil. These costs shall include but are not limited to all required testing, lab analysis, certification by a licensed professional Engineer, state and local tipping fees.
The disposal of all excess excavation will be considered a part of the various bid items and will not be paid for separately. If the location of the proposed watermain requires more trench backfill than what has been estimated, the additional excess excavation to be disposed of will not be considered for extra payment but will be considered incidental to the cost of the Trench Backfill item.”