

Littlefield Dam Removal Project

Request for Proposals



February 2026

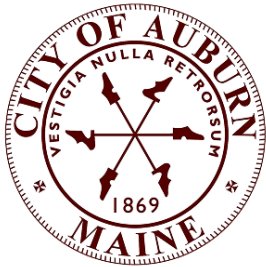


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SECTION 00 11 01
NOTICE TO CONTRACTORS

ARTICLE 1 – RECEIPT OF BIDS

- 1.01 Bid proposals for the Littlefield Dam Removal Project will be received by the City of Auburn.
- 1.02 Bids will be accepted only via hardcopy to Dan Goyette at 60 Court Street, Auburn, Maine 04210 by March 12, 2026 at 2pm local time, after which they will not be received or accepted. A digital copy of the bid should be submitted to Dan Goyette (dgoyette@auburnmaine.gov) and Keith Kantack (kkantack@interfluve.com) . There is a 25 MB size limit on emails that can be received at these addresses.

ARTICLE 2 – GENERAL DESCRIPTION OF WORK

- 2.01 In general, this project, located at 44.065194°N, 70.264329°W in Auburn, ME, includes the removal of a concrete dam and a remnant dam. The Work includes, but is not limited to, the following:
- A. Strict compliance with environmental regulations in and around water bodies;
 - B. Implementation and maintenance of erosion control measures;
 - C. Temporary stream diversion and control of water;
 - D. Dam removal;
 - E. Grading operations and materials management in wetland and saturated soils;
 - F. Excavation and construction of stream channels; and
 - G. Establishment of native grasses, forbs, shrubs, and trees.

ARTICLE 3 – TYPE OF BID

- 3.01 Bid shall be on a unit price basis for respective bid items identified in the bid.

ARTICLE 4 – DOCUMENT EXAMINATION AND PROCUREMENT

- 4.01 The Contract Documents may be examined at the following locations:

<https://www.auburnmaine.gov/departments/finance/bids/index.php>

ARTICLE 5 – QUALIFICATION

- 5.01 Each bid must be accompanied by references for work that the Bidder performed. Refer to the requirements described in Section 00 21 13 – Instructions to Bidders.

ARTICLE 6 – BID AND CONTRACT SECURITY

- 6.01 Bidders are required to provide bid bond in the amount of 5% of their bid total. The successful bidder will be required to provide performance and payment bonds. The performance and payment bonds shall each be in the amount of one hundred percent (100%) of the contract price and payable to City of Auburn.

ARTICLE 7 – STATE INSPECTION

- 7.01 Work performed on this project shall be subject to inspection by representatives of local, state, and federal agencies.
- 7.02 Such inspection shall in no sense make the State Government a party to this contract, unless said Government is also the Owner, and will in no way interfere with the rights of either party hereunder.
- 7.03 Representatives of the local, state, and federal agencies shall be given Right of Access to all portions of the proposed work, including but not limited to, actual work site, storage yards, offsite manufacturing and fabricating location, and job records.

ARTICLE 8 – MANDATORY PRE-BID CONFERENCE

- 8.01 A mandatory pre-bid conference will be held in person at 1pm on February 24, 2026 at the Site, as described in Section 00 21 13 – Instructions to Bidders. Bidders are required to attend.

ARTICLE 9 – COMPLETION DATES

- 9.01 In-water work shall be completed between July 15, 2026 and September 30, 2026. Project shall be substantially complete no later than October 30, 2026, with planting and site restoration complete by May 30, 2027. See Requirements of Section 00 52 00 – Agreement.
- 9.02 The Project shall adhere to all water control and time-of-year restrictions in accordance with the project permits. Refer to Section 00 31 46 – Permits, Section 01 35 13 – Special Conditions, and Appendix A.

ARTICLE 10 – OWNER’S RIGHT TO REJECT BIDS

- 10.01 Owner reserves the right to waive irregularities and to reject any or all bids.

END OF SECTION 00 22 13

SECTION 00 21 13 INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. *Issuing Office* – The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents are available in electronic format at <https://www.auburn-maine.gov/departments/finance/bids/index.php> (See also Section 00 11 01 – Notice to Contractors)
- 2.02 Complete sets of the Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. It is the Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. The Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.03 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 No award will be made to any Bidder who cannot meet all of the following requirements:
- A. They shall not have defaulted nor turned the work over to the bonding company on any contract within three years prior to the bid date.
- B. They shall maintain a permanent place of business.
- C. They shall have adequate personnel and equipment to perform the work expeditiously.
- D. They shall have suitable financial status to meet obligations incidental to the work.
- E. They shall have appropriate technical experience satisfactory to the Engineer and the Owner in the class of work involved.
- F. They shall be registered with the Secretary of State to transact business in Maine.
- G. They shall provide a minimum of three (3) references for previous projects that demonstrate experience with earthwork in sensitive environments, water control in tidal environments, ecological restoration, and dam removal.

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- H. They shall not have failed to complete previous contracts on time, including approved time extensions.
- 3.02 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit written evidence such as financial data, present commitments, and such other data as may be called for below.
- A. The Contractor shall provide references (written description of type of work performed, project owner, total cost of contract, and reference contact with telephone number) for work that they performed (indicate whether as prime contractor or subcontractor) for at least three projects that demonstrate experience with earthwork in sensitive environments, water control in riverine environments, ecological restoration, and dam removal. References will be checked for satisfactory execution of the primary tasks involved in the Project, including:
1. Strict compliance with environmental regulations in and around water bodies;
 2. Implementation and maintenance of erosion control measures;
 3. Temporary stream diversion and control of water (including tidal);
 4. Dam removal;
 5. Grading operations and materials management in wetland and saturated soils;
 6. Excavation and construction of stream channels and streambanks; and
 7. Establishment of native grasses, forbs, shrubs, and trees.
- B. Contractor selection will be contingent upon positive responses from references.
- 3.03 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- 4.01 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. 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. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
- 4.02 Site visits by the Bidder are not restricted to certain hours. However, visitors are encouraged to provide notice of the date and time of the site visit with the Owner and Engineer prior to the site visit. Contact the Owner and Engineer: Dan Goyette (dgoyette@auburnmaine.gov) and Keith Kantack (kkantack@interfluve.com).
- 4.03 It is the responsibility of each Bidder before submitting a Bid to:
- A. Examine and carefully study the Bidding Documents, and the other related data identified in the Bidding Documents;

- B. Visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
 - C. Become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
 - D. Consider the information known to Bidder; 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, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs;
 - E. Agree at the time of submitting its Bid that 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(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
 - F. 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;
 - G. 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; and
 - H. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.04 The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable

to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 – MANDATORY PRE-BID CONFERENCE

- 5.01 A mandatory pre-bid conference will be held in person at 1pm on February 24, 2026 at the Site.
- 5.02 Representatives of Owner and Engineer will be present to discuss the Project. Engineer will transmit to all prospective Bidders of record such Addenda as the 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 6 – SITE AND OTHER AREAS

- 6.01 The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to the Owner and Engineer in writing via email to Dan Goyette (dgoyette@auburnmaine.gov) and Keith Kantack (kkantack@interfluve.com) by 5pm local time on February 26, 2026. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda emailed to all parties recorded by Engineer as having received the Bidding Documents. 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, or change the Bidding Documents as deemed advisable by Owner or Engineer.

ARTICLE 8 – CONTRACT TIMES

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

ARTICLE 9 – LIQUIDATED DAMAGES

- 9.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

ARTICLE 10 – SUBSTITUTE AND “OR-EQUAL” ITEMS

- 10.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material

or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

ARTICLE 11 – SUBCONTRACTORS, SUPPLIERS AND OTHERS

- 11.01 If the Bid Form or Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. 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, individual, or entity if requested by Owner. 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 a substitute.
- 11.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not 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 revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 7.07 of the General Conditions.
- 11.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.
- 11.04 Engagement of minority firms, women's business enterprises, and labor surplus area firms are encouraged.

ARTICLE 12 – PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents. Additional copies may be obtained from Engineer. The bid form shall be submitted via email and labeled: "Bid Form."
- 12.02 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 Bid item and allowance item listed therein. In the case of optional alternatives, the words "No Bid," "No Change," or "Not Applicable" may be entered.
- 12.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer 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.
- 12.04 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 official address of the partnership shall be shown.

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- 12.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 12.06 A Bid by an individual shall show the Bidder's name and official address.
- 12.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 12.08 All names shall be printed in ink below the signatures.
- 12.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 12.11 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 13 – BASIS OF BID; COMPARISON OF BIDS

13.01 *Lump Sum*

- A. Bidders shall submit a Bid on individual sections or any combination of sections as set forth in the Bid Form.
1. Bidders may submit a Bid for any of the separate sections or any combination of sections as provided in the Bid Form. Submission of a Bid on any section signifies Bidder's willingness to enter into a Contract for that section alone at the price offered.
 2. Bidders offering a Bid on one or more sections shall be capable of completing the Work within the time period stated in the Agreement.

13.02 *Unit Price*

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. 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.

13.03 *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.

13.04 *Completion Time Comparisons*

- A. Bid prices will be compared after adjusting for differences in the time designated by Bidders for Substantial Completion. The adjusting amount will be determined at the rate set forth in the Contract Documents for liquidated damages for failing to achieve Substantial Completion for each day before or after the desired date appearing in Article 4 of the Agreement.

ARTICLE 14 – SUBMITTAL OF BID

14.01 The Bid Form is to be completed and submitted with the following documents:

- A. List of Proposed Subcontractors;
- B. List of Proposed Suppliers;
- C. List of Qualification Projects Including References;
- D. Evidence of authority to do business in the State of Maine;
- E. Contractor's License No.: _____;
- F. Proposed Schedule for Project Completion.

14.02 A Bid shall be submitted no later than the date and time prescribed as a hardcopy and digitally, as indicated in the advertisement or invitation to bid. Submitted information must include 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 any other required documents. The emailed bid shall be addressed to the Owner and submitted to Dan Goyette (dgoyette@auburnmaine.gov) and Keith Kantack (kkantack@interfluve.com).

ARTICLE 15 – MODIFICATION AND WITHDRAWAL OF BID

- 15.01 A Bid may be modified or 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.
- 15.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 16 – OPENING OF BIDS

16.01 Bids will be opened and reviewed by the Owner following the Bid due date.

ARTICLE 17 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

17.01 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 18 – NON-RESIDENT CONTRACTORS

- 18.01 The successful bidder, if a corporation established under laws other than the State of Maine, shall file a “statement of foreign qualification to conduct activities” with the Maine Bureau of Corporations, and shall also file, at the time of the execution of the contract, with the Owner, notice of the name of its resident attorney, appointed as required by the laws of the State of Maine.
- 18.02 The successful bidder, if not a resident of Maine, and not a corporation, shall file, at the time of execution of the contract, with the Owner a written appointment of a resident of the state of Maine, having an office or place of business therein, to be his true and lawful attorney upon whom all lawful processes in any actions or proceedings against him may be served; and in such writing, which shall set forth said attorney's place of residence, shall agree that any lawful process against him which is served on said attorney shall be of the same legal force and validity as if served on him and that the authority shall continue in force so long as any liability remains outstanding against him in Maine.
- 18.03 A Non-resident Contractor shall be deemed to be:
- A. A person who is not a resident of the State of Maine.
 - B. Any partnership that has no member thereof resident of the State of Maine.
 - C. Any corporation established under laws other than those of the State of Maine.

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 further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 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.
- 19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.

- 19.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.

ARTICLE 20 – CONTRACT SECURITY 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 executed Agreement to Owner, it shall be accompanied by such bonds.

ARTICLE 21 – SIGNING OF AGREEMENT

- 21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

END OF SECTION 00 21 13

SECTION 00 31 46
PERMITS**ARTICLE 1 – APPLICABLE PERMITS**

1. The following are the applicable permits for work under the Contract:
 - A. To be completed by Owner
 1. N/A
 - B. Attached and to be Completed by Contractor
 1. N/A
 - C. Not Attached but to be Completed or Obtained by Contractor
 1. Storm Water Pollution Prevention Plan (SWPPP)
 2. Maine Pollution Discharge Elimination System (MPDES) Maine Construction General Permit (MCGP)
 3. Any and all other permits required to construct the Work in accordance with all applicable laws and regulations.
 - D. Not Attached, expected to be provided by Owner prior to Notice to Proceed. No in-water work may commence until the following are received.
 1. USACE Section 404
 2. MDEP NRPA, Permit by Rule

END OF SECTION 00 31 46

BID FORM FOR CONSTRUCTION CONTRACT

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

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: **City of Auburn**, herein after referred to as Owner, and Inter-Fluve, Inc., herein after referred to as Engineer.
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
 - A. List of Proposed Subcontractors;
 - B. List of Proposed Suppliers;
 - C. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - D. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
 - E. Required Bidder Qualification Statement with supporting data and References; and
 - F. Proposed Schedule for Project Completion.

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES**3.01 Lump Sum and Unit Price Bids**

A. Bidder will perform the following Work at the indicated unit prices:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
1	Mobilization and Demobilization	LS	1	\$	\$
2	Clearing and Grubbing	LS	1	\$	\$
3	Erosion, Sediment and Pollution Control	LS	1	\$	\$
4	Access Development	LS	1	\$	\$
5	Water Control	LS	1	\$	\$
6	Dam Removal - Littlefield Dam	LS	1	\$	\$
7	Dam Removal - Remnant Dam	LS	1	\$	\$
8	Ledge Modification	CY	200	\$	\$
9	Fabric Slope Protection	SY	525	\$	\$
10	Potted Plants - Tree (1 gallon)	EA	140	\$	\$
11	Potted Plants - Shrub (1 gallon)	EA	140	\$	\$
12	Live Stakes	EA	200	\$	\$
13	Seeding - Wetland Mix	ACRE	1.1	\$	\$
14	Seeding - Conservation Mix	ACRE	2.2	\$	\$

B. Bidder acknowledges that:

- each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
- estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.02 Total Bid Price (Lump Sum and Unit Prices)

Total Bid Price (Total of all Lump Sum and Unit Price Bids)	\$
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ARTICLE 4—BASIS OF BID—COST-PLUS FEE – NOT USED**ARTICLE 5—PRICE-PLUS-TIME BID – NOT USED****ARTICLE 6—TIME OF COMPLETION**

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7—BIDDER’S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA**7.01 Bid Acceptance Period**

- A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

7.02 Instructions to Bidders

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

7.03 Receipt of Addenda

- A. Bidder hereby acknowledges receipt of the following Addenda: **[Add rows as needed. Bidder is to complete table.]**

Addendum Number	Addendum Date

ARTICLE 8—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS**8.01 Bidder’s Representations**

- A. In submitting this Bid, Bidder represents the following:
1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and

performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.

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

8.02 *Bidder's Certifications*

A. The Bidder certifies the following:

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

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

Address for giving notices:

Bidder's Contact:

Name:

(typed or printed)

Title:

(typed or printed)

Phone:

Email:

Address:

Bidder's Contractor License No.: (if applicable)

BID SECURITY FORM (PENAL SUM FORM)

Bidder Name: [Full formal name of Bidder] Address <i>(principal place of business)</i> : [Address of Bidder's principal place of business]	Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business]
Owner Name: City of Auburn Address <i>(principal place of business)</i> : 60 Court St. Auburn, ME 04210	Bid Project <i>(name and location)</i> : Littlefield Dam Removal Auburn, ME Bid Due Date: March 12, 2026
Bond Penal Sum: [Amount] Date of Bond: [Date]	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder	Surety
_____ <i>(Full formal name of Bidder)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature) (Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<i>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.</i>	

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

NOTICE OF AWARD

Date of Issuance: **[Date]**

Owner: **City of Auburn**

Owner's Project No.:

Engineer: **Inter-Fluve, Inc.**

Engineer's Project No.:

Project: **Littlefield Dam Removal Project**

Contract Name: **Littlefield Dam Removal Project**

Bidder:

Bidder's Address:

You are notified that Owner has accepted your Bid dated **[date]** for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

[Describe Work, alternates, or sections of Work awarded]

The Contract Price of the awarded Contract is \$**[Contract Price]**. Contract Price is subject to adjustment based on the provisions of the Contract, including but not limited to those governing changes, Unit Price Work, and Work performed on a cost-plus-fee basis, as applicable.

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

☐ Drawings will be delivered separately from the other Contract Documents.

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

1. Deliver to Owner **[#]** counterparts of the Agreement, signed by Bidder (as Contractor).
2. Deliver with the signed Agreement(s) the Contract security (such as required performance and payment bonds) and insurance documentation, as specified in the Instructions to Bidders and in the General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any): **[Describe other conditions that require Successful Bidder's compliance]**

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: **City of Auburn**

By (signature): _____

Name (printed): _____

Title: _____

Copy: Engineer

THIS AGREEMENT is dated as of the _____ day of _____ in the year of 20__ by and between **City of Auburn**, hereinafter called Owner, and _____, hereinafter called Contractor. Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:
- A. Strict compliance with environmental regulations in and around water bodies;
 - B. Implementation and maintenance of erosion control measures;
 - C. Temporary stream diversion and control of water (including tidal);
 - D. Dam removal;
 - E. Grading operations and materials management in wetland and saturated soils;
 - F. Excavation and construction of stream channels and streambanks; and
 - G. Establishment of native grasses, forbs, shrubs, and trees.

ARTICLE 2 - THE PROJECT

- 2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

LITTLEFIELD DAM REMOVAL

The Work includes, but is not limited to, the following:

- Strict compliance with environmental regulations in and around water bodies;
- Implementation and maintenance of erosion control measures;
- Temporary stream diversion and control of water;
- Dam removal;
- Grading operations and materials management in wetland and saturated soils;
- Excavation and construction of stream channels; and
- Establishment of native grasses, forbs, shrubs, and trees.

ARTICLE 3 - ENGINEER

- 3.01 The Project has been designed by:

Inter-Fluve
181 Main Street, 2nd Floor
P.O. Box 236
Damariscotta, ME 04543

who is hereinafter called Engineer and who is to act as Resident Project Representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract

Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

4.01 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- B. This contract is contingent on receipt of all permits.

4.02 *Dates for Substantial Completion and Final Payment*

- A. The Work will be completed and ready for final payment in accordance with paragraph 15.06 of the General Conditions in conformance with the following time frame: In-water work in shall be completed no later than September 30, 2026. Project shall be substantially complete no later than October 30, 2026, with planting and site restoration complete by May 30, 2027 and plant warranty period expiring May 30, 2030.

4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - 1. Substantial Completion: Contractor shall pay Owner \$1000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
 - 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$1000 for each day that expires after such time until the Work is completed and ready for final payment.
 - 3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

ARTICLE 5 - CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraph 5.01.A below:

A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 - PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 1st day of each month during performance of the Work as provided in Paragraphs 6.02.A.1, below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract

a. 90 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and

b. 90 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 - INTEREST

7.01 Not used

ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied 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, 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. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract 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 Contractor; and (3) Contractor's safety precautions and programs.
 - F. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.

- G. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- H. Contractor is aware that it is the Contractor's responsibility to maintain the security of construction access gates and coordinate with the property owner throughout the project.
- I. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- J. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- K. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- L. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
- M. The Contractor agrees to defend and indemnify the Owner and Engineer, and their respective officers, directors, members, partners, principals, and employees (collectively, "Indemnitees") from and against any and all claims, damages, causes of action, liability, and costs including reasonable attorneys' fees and costs, arising from or in any way related to the performance of the Work under this Contract or alleged to relate in any way to the Work performed under this Contract. This indemnity obligation includes any claim, cause of action, demand, liability or cost arising from or in any way related to any act or omission of any Subcontractor or Supplier of the Contractor. The Contractor is not obligated to indemnify the Indemnitees for damages that are judicially determined to have been caused by the negligence or intentional misconduct of the Indemnitees.

ARTICLE 9 - CONTRACT DOCUMENTS

9.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. Instruction to Bidders
 - 2. Notice to Contractors
 - 3. Permits
 - 4. This Agreement.
 - 5. Performance bond.
 - 6. Payment bond.

7. General Conditions.
8. Supplementary Conditions.
9. General Requirements, Existing Conditions, Earthwork, and Exterior Improvements as listed on the project title page and Table of Contents of the Contract Documents.
10. Drawings with each sheet bearing the following general title: Littlefield Dam Removal Project.
11. Addenda (numbers _____ to _____, inclusive).
12. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages 1 to , inclusive of submitted documents).
 - b. Evidence of Contractor's authority to do business in the State of Maine.
 - c. Documentation submitted by Contractor prior to Notice of Award.
13. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice of Award
 - b. Notice to Proceed.
 - c. Work Change Directives.
 - d. Change Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 *Terms*

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

10.02 *Assignment of Contract*

- A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may

be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 *Successors and Assigns*

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

10.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Safety*

- A. Neither the professional activities of the Engineer, nor the presence of the Engineer at the construction/project site, shall impose any duty on the Engineer, nor shall it relieve the Contractor and all subcontractors of any of their responsibilities and duties to perform the Work in accordance with the Contract Documents and to comply with any health or safety precautions required by any regulatory agencies. The Engineer does not have authority to control any contractor or its employees in connection with their work or any health or safety programs or procedures. The Owner agrees that the Contractor and Subcontractors are solely responsible for job site safety. Accordingly, the Owner shall require the contractor and all subcontractors to defend, indemnify, and hold harmless the Engineer from any and all claims, losses, suits, damages, and liabilities, including attorneys' fees and costs, arising in any way from such Contractors' or Subcontractors' services or work product, except to the extent caused by the sole negligence of the Engineer.

10.06 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.06:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.07 *Subcontractors*

- A. Contractor must obtain prior written approval from the Owner before engaging any subcontractor whose presence and role on the project was not initially identified in the bid submittal.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or on their behalf.

This Agreement will be effective on _____, _____ (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR:

By: _____

By: _____

[CORPORATE SEAL]

[CORPORATE SEAL]

Attest _____

Attest _____

Address for giving notices:

Address for giving notices:

(If OWNER is a corporation, attach evidence of authority to sign. If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of OWNER-CONTRACTOR Agreement.)

License No. _____
(Where applicable)

Agent for service of process: _____

(If CONTRACTOR is a corporation or a partnership, attach evidence of authority to sign.)

Designated Representative:

Designated Representative:

Name: _____

Name: _____

Title: _____

Title: _____

Address: _____

Address: _____

END OF SECTION – 00 52 00

NOTICE TO PROCEED

Owner: City of Auburn Owner's Project No.: _____
Engineer: Inter-Fluve, Inc. Engineer's Project No.: _____
Contractor: _____ Contractor's Project No.: _____
Project: Littlefield Dam Removal Project
Contract Name: Littlefield Dam Removal Project
Effective Date of Contract: _____

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on **[date Contract Times are to start]** pursuant to Paragraph 4.01 of the General Conditions.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work will be done at the Site prior to such date.

In accordance with the Agreement: **[Select one of the following two alternatives, insert dates or number of days, and delete the other alternative.]**

The date by which Substantial Completion must be achieved is **[date for Substantial Completion, from Agreement]**, and the date by which readiness for final payment must be achieved is **[date for readiness, from Agreement]**.

[or]

The number of days to achieve Substantial Completion is **[number of days, from Agreement]** from the date stated above for the commencement of the Contract Times, resulting in a date for Substantial Completion of **[date, calculated from commencement date above]**; and the number of days to achieve readiness for final payment is **[number of days, from Agreement]** from the commencement date of the Contract Times, resulting in a date for readiness for final payment of **[date, calculated from commencement date above]**.

Before starting any Work at the Site, Contractor must comply with the following:

[Note any access limitations, security procedures, or other restrictions]

Owner: [Full formal name of Owner]
By *(signature)*: _____
Name *(printed)*: _____
Title: _____
Date Issued: _____
Copy: Engineer

PERFORMANCE BOND

Contractor Name: [Full formal name of Contractor] Address <i>(principal place of business)</i> : [Address of Contractor's principal place of business]	Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business]
Owner Name: City of Auburn, Maine Mailing address <i>(principal place of business)</i> : 60 Court St. Auburn, ME 04210	Contract Description <i>(name and location)</i> : Littlefield Dam Removal Auburn, ME Contract Price: [Amount from Contract] Effective Date of Contract: [Date from Contract]
Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <div style="text-align: center;"><i>(Signature)</i></div>	By: _____ <div style="text-align: center;"><i>(Signature)(Attach Power of Attorney)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>	Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
<i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i>	

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

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

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

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

PAYMENT BOND

Contractor Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Auburn Mailing address <i>(principal place of business)</i> : 60 Court St Auburn, ME 04210	Contract Description <i>(name and location)</i> : Littlefield Dam Removal Auburn, ME Contract Price: Effective Date of Contract:
Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <div style="text-align: center;"><i>(Signature)</i></div>	By: _____ <div style="text-align: center;"><i>(Signature)(Attach Power of Attorney)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>	Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div>
Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>	Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div>
Title: _____	Title: _____
<i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i>	

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

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

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

WORK CHANGE DIRECTIVE NO.: [Number of Work Change Directive]

Owner: **City of Auburn, Maine**
Engineer: **Inter-Fluve, Inc.**
Contractor:
Project: **Littlefield Dam Removal**
Contract Name: **Littlefield Dam Removal**
Date Issued:

Owner's Project No.:
Engineer's Project No.:
Contractor's Project No.:

Effective Date of Work Change Directive:

Contractor is directed to proceed promptly with the following change(s):

Description:

[Description of the change to the Work]

Attachments:

[List documents related to the change to the Work]

Purpose for the Work Change Directive:

[Describe the purpose for the change to the Work]

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

☐ Non-agreement on pricing of proposed change. ☐ Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: \$ _____ **[increase] [decrease] [not yet estimated].**

Contract Time: _____ days **[increase] [decrease] [not yet estimated].**

Basis of estimated change in Contract Price:

☐ Lump Sum ☐ Unit Price ☐ Cost of the Work ☐ Other

Recommended by Engineer

Authorized by Owner

By:

Title:

Date:

CHANGE ORDER NO.: [Number of Change Order]

Owner: **City of Auburn**
Engineer: **Inter-Fluve, Inc.**

Owner's Project No.:
Engineer's Project No.:
Contractor's Project No.:

Contractor:
Project: **Littlefield Dam Removal**

Contract Name:

Date Issued: Effective Date of Change Order:

The Contract is modified as follows upon execution of this Change Order:

Description:

[Description of the change]

Attachments:

[List documents related to the change]

Change in Contract Price	Change in Contract Times [State Contract Times as either a specific date or a number of days]
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] from previously approved Change Orders No. 1 to No. [Number of previous Change Order] : \$ _____	[Increase] [Decrease] from previously approved Change Orders No.1 to No. [Number of previous Change Order] : Substantial Completion: _____ Ready for final payment: _____
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] this Change Order: \$ _____	[Increase] [Decrease] this Change Order: Substantial Completion: _____ Ready for final payment: _____
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____

Recommended by Engineer (if required)

Accepted by Contractor

By: _____

Title: _____

Date: _____

Authorized by Owner

Approved by Funding Agency (if applicable)

By: _____

Title: _____

Date: _____

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

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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GUIDELINES FOR USE OF EJCDC® C-700, STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), is the foundation document for the EJCDC Construction Series. The General Conditions define the basic rights, responsibilities, risk allocations, and contractual relationship of the Owner and Contractor, and establish how the Contract is to be administered.

2.0 OTHER DOCUMENTS

EJCDC documents are intended to be used as a system and changes in one EJCDC document may require a corresponding change in other documents. Other EJCDC documents may also serve as a reference to provide insight or guidance for the preparation of this document.

These General Conditions have been prepared for use with either EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price), or EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee) (2018 Editions). The provisions of the General Conditions and the Agreement are interrelated, and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018).

The full EJCDC Construction series of documents is discussed in the EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (2018).

3.0 ORGANIZATION OF INFORMATION

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. Careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012 Edition) when preparing documents. EJCDC® N-122/AIA® A521 is available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI MasterFormat™ is used for organizing the Project Manual, consult CSI MasterFormat™ for the appropriate document number (e.g., under 00 11 00, Advertisements and Invitations), and accordingly number the document and its pages.

4.0 EDITING THIS DOCUMENT

Remove these Guidelines for Use. Some users may also prefer to remove the two cover pages.

Although it is permissible to revise the Standard EJCDC Text of C-700 (the content beginning at page 1 and continuing to the end), it is common practice to leave the Standard EJCDC Text of C-700 intact and unaltered, with modifications and supplementation of C-700's provisions set forth in EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018). If the Standard Text itself is revised, the

user must comply with the terms of the License Agreement, Paragraph 4.0, Document-Specific Provisions, concerning the tracking or highlighting of revisions. The following is a summary of the relevant License Agreement provisions:

1. The term “Standard EJCDC Text” for C-700 refers to all text prepared by EJCDC in the main body of the document. Document covers, logos, footers, instructions, or copyright notices are not Standard EJCDC Text for this purpose.
2. During the drafting or negotiating process for C-700, it is important that the two contracting parties are both aware of any changes that have been made to the Standard EJCDC Text. Thus, if a draft or version of C-700 purports to be or appears to be an EJCDC document, the user must plainly show all changes to the Standard EJCDC Text, using “Track Changes” (redline/strikeout), highlighting, or other means of clearly indicating additions and deletions.
3. If C-700 has been revised or altered and is subsequently presented to third parties (such as potential bidders, grant agencies, lenders, or sureties) as an EJCDC document, then the changes to the Standard EJCDC Text must be shown, or the third parties must receive access to a version that shows the changes.
4. Once the document is ready to be finalized (and if applicable executed by the contracting parties), it is no longer necessary to continue to show changes to the Standard EJCDC Text. The user may produce a final version of the document in a format in which all changes are accepted, and the document at that point does not need to include any “Track Changes,” redline/strikeout, highlighting, or other indication of additions and deletions to the Standard EJCDC Text.

5.0 LICENSE AGREEMENT

This document is subject to the terms and conditions of the **License Agreement, 2018 EJCDC® Construction Series Documents**. A copy of the License Agreement was furnished at the time of purchase of this document, and is available for review at www.ejcdc.org and the websites of EJCDC’s sponsoring organizations.

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

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

requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.

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

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

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

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

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

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

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

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

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

2.02 *Copies of Documents*

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

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 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 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 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.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

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

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

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

3.02 *Reference Standards*

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

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

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

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

B. *Resolving Discrepancies*

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

3.04 *Requirements of the Contract Documents*

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

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

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 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 versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 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 precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

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

4.02 *Starting the Work*

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

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

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

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 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 must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

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

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

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

5.01 *Availability of Lands*

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

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

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

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

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

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

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

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

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

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

5.05 *Underground Facilities*

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

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

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

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

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

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

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

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

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

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

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

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

Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

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

6.03 *Contractor's Insurance*

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

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

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

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

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

6.06 *Receipt and Application of Property Insurance Proceeds*

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

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

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

7.02 *Supervision and Superintendence*

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

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

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

7.04 *Services, Materials, and Equipment*

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

7.05 *"Or Equals"*

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

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

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
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 equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

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

7.09 *Permits*

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

7.10 *Taxes*

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

7.11 *Laws and Regulations*

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

7.12 *Record Documents*

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

7.13 *Safety and Protection*

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

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

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

7.15 *Emergencies*

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

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 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. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

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

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
- 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

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

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

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

8.03 *Legal Relationships*

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

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

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

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

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

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

9.12 *Safety Programs*

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

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

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

10.02 *Visits to Site*

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

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

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

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

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

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

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

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

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

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

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

11.02 *Change Orders*

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

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

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

11.05 *Owner-Authorized Changes in the Work*

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

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

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);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

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

11.09 *Change Proposals*

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

- B. *Change Proposal Procedures*

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

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

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

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

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 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; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

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

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

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
 - 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 6. Expenses incurred in preparing and advancing Claims.
 - 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*
 - 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
 - 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:* Contractor agrees that:
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 for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance:* Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

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

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

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

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

14.01 *Access to Work*

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

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

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

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

14.03 *Defective Work*

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

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

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

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 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, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

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

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

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 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.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

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;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
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 based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle 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 will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

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

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

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 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

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

15.06 *Final Payment*

A. *Application for Payment*

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 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

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

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 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 for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

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

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 - 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 requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

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

18.03 *Cumulative Remedies*

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

18.04 *Limitation of Damages*

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

18.05 *No Waiver*

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

18.06 *Survival of Obligations*

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

18.07 *Controlling Law*

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

18.08 *Assignment of Contract*

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

18.09 *Successors and Assigns*

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

18.10 *Headings*

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

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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

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

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

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

SC-1.01 *Defined Terms*

- Paragraph 1.01.A.8. is amended by adding “authorized representatives of” between “by” and “Contractor”.
- Delete Paragraph 1.01.A.30 in its entirety and insert the following in its place:

Owner- The individual(s) or entity(s) 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. For the purposes of this contract, the following definition holds:

Owner – **City of Auburn**

- Paragraph 1.01.A.50 is amended by adding “an authorized representative of” between “by” and “Owner”.

ARTICLE 2—PRELIMINARY MATTERS

SC-2.02 *Copies of Documents*

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

Owner shall furnish to Contractor **one (1)** printed copies of the Contract Documents (including one fully signed counterpart of the Agreement), and **one copy** in electronic portable document format (PDF).

SC - 2.06 *Electronic Transmittals*

- Supplement Paragraph 2.06 of the General Conditions by adding the following paragraph:
 - D. *Requests by Contractor for Electronic Documents in Other Formats*
 1. Release of any Electronic Document versions of the Project documents in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be at the sole discretion of the Owner.

2. To extent determined by Owner, in its sole discretion, to be prudent and necessary, release of Electronic Documents versions of Project documents and other Project information requested by Contractor (“Request”) in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be subject to the provisions of the Owner’s response to the Request, and to the following conditions to which Contractor agrees:
 - a. The content included in the Electronic Documents created by Engineer and covered by the Request was prepared by Engineer as an internal working document for Engineer’s purposes solely, and is being provided to Contractor on an “AS IS” basis without any warranties of any kind, including, but not limited to any implied warranties of fitness for any purpose. As such, Contractor is advised and acknowledges that the content may not be suitable for Contractor’s application, or may require substantial modification and independent verification by Contractor. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.
 - b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Engineer to Contractor under the request are only for convenience of Contractor. Any conclusion or information obtained or derived from such data will be at the Contractor’s sole risk and the Contractor waives any claims against Engineer or Owner arising from use of data in Electronic Documents covered by the Request.
 - c. Contractor shall indemnify and hold harmless Owner and Engineer and their subconsultants from all claims, damages, losses, and expenses, including attorneys’ fees and defense costs arising out of or resulting from Contractor’s use, adaptation, or distribution of any Electronic Documents provided under the Request.
 - d. Contractor agrees not to sell, copy, transfer, forward, give away or otherwise distribute this information (in source or modified file format) to any third party without the direct written authorization of Engineer, unless such distribution is specifically identified in the Request and is limited to Contractor’s subcontractors. Contractor warrants that subsequent use by Contractor’s subcontractors complies with all terms of the Contract Documents and Owner’s response to Request.
3. In the event that Owner elects to provide or directs the Engineer to provide to Contractor any Contractor-requested Electronic Document versions of Project information that is not explicitly identified in the Contract Documents as being available to Contractor, the Owner shall be reimbursed by Contractor on an hourly basis (at \$150 per hour) for any engineering costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Engineer.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

No Supplementary Conditions in this Article.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

SC- 4.04 Progress Schedule

- Paragraph 4.04.B. is amended by inserting “authorized representatives of” between “as” and “Owner”.

SC- 4.05 Delays in Contractor’s Progress

- Paragraph 4.05.C. is amended by adding the following at the end:

Abnormal Weather Conditions: Abnormal weather conditions shall be defined as precipitation in excess of 2-inch depth over a 24-hour period. Contractor shall provide unit prices for Bid Items that anticipate five (5) days of Abnormal Weather Conditions throughout the duration of this Contract.

If “abnormal weather conditions” as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.

- Paragraph 4.05.G. is deleted and replaced with the following:

Contractor shall not be entitled to any Change Proposal seeking an adjustment under this Paragraph 4.05 unless: (1) the Contractor provides the Engineer with written notice, which describes the delay, disruption or interference, within seventy-two (72) hours of the commencement of the delay, disruption or interference; (2) if the Change Proposal seeks an adjustment in Contract Price or Contract Times (but only to the extent expressly permitted under this Paragraph 4.05), the Contractor provides the Engineer with a Change Proposal within 30 days of the commencement of the delay, disruption or interference; and (3) an authorized representative of Owner accepts the Change Proposal and executes a Change Order.

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

SC- 5.02 Use of Site and Other Areas

- Paragraph 5.02.A.2. is amended by adding the following at the end:

Notwithstanding any other provision of this Paragraph, no settlement of any claim admitting liability of, or imposing duties or restrictions upon, any person or entity required to be indemnified above may be entered without the prior written consent of such person or entity, which shall not be unreasonably withheld.

5.03 *Subsurface and Physical Conditions*

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely:

Report Title	Date of Report	Technical Data
NONE	N/A	N/A

- F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
NONE	N/A	N/A

- G. Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at **the website listed in the Instructions to Bidders**, or may request copies from Engineer.

SC- 5.04 *Differing Subsurface or Physical Conditions*

- Paragraph 5.04.D.2.b. is amended by inserting “bore, measurement” between “test” and “or study”.

SC – 5.06 *Hazardous Environmental Conditions at Site*

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

Report Title	Date of Report	Technical Data
NONE	N/A	N/A

5. The following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
NONE	N/A	N/A

- Paragraph 5.06.I. is amended by adding the following at the end:

Owner's obligation of indemnification shall only extend to a claim brought by a third party.

ARTICLE 6—BONDS AND INSURANCE

SC- 6.02 Insurance—General Provisions

- Paragraph 6.02.A. is deleted and replaced with the following:

Notwithstanding any other provision of this Contract, Owner shall not be required to purchase any insurance under this Contract, but Owner, at Owner's option, may purchase and maintain, at Owner's expense, certain insurance coverage.

SC - 6.03 Contractor's Insurance

- Paragraph 6.03 is amended by adding the following Paragraph 6.03.K. at the end:

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:
 - a. State: Statutory
 - b. Applicable Federal (e.g., Longshoreman's): Statutory
 - c. Employer's Liability: \$1,000,000 each person
2. Contractor's General Liability which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody and control of Contractor:
 - a. General Aggregate (except Products-Completed Operations) \$1,000,000
 - b. Products-Completed Operations Aggregate \$1,000,000
 - c. Personal and Advertising Injury (Per Person/Organization) \$1,000,000
 - d. Each Occurrence (Bodily Injury and Property Damage) \$1,000,000

3. Automobile Liability under Paragraph 6.03.D of the General Conditions:
 - a. Bodily Injury:
Each Person \$1,000,000
Each Accident \$1,000,000
4. The Contractual Liability coverage shall provide coverage for not less than the following amounts:
 - a. Bodily Injury:
Each person \$1,000,000
Each Accident \$1,000,000
 - b. Property Damage:
Each person \$1,000,000
Each Accident \$1,000,000
5. The Umbrella Policy shall provide coverage for not less than the following amount:
 - a. \$1,000,000
6. The Pollution Liability coverage shall provide coverage for not less than the following amount:
 - a. \$1,000,000
7. The entities listed below are “additional insureds” including their respective offices, directors, agents and employees:
 - a. ENGINEER: Inter-Fluve, Inc.
 - b. OWNER: **City of Auburn**
 - c. The following entities:
Pioneer Plastics Corporation
MCC Acquisition LLC
Mid-Maine Waste Action Corp
Central Maine Power Company

SC - 6.04 *Builder’s Risk and Other Property Insurance*

- Supplement Paragraph 6.04 of the General Conditions with the following provisions:
 - F. *Builder’s Risk Requirements:* The builder’s risk insurance must:
 1. be written on a builder’s risk “all risk” policy form that at a minimum includes insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment stored and in transit, and must not exclude the coverage of the following risks: fire; windstorm; hail; flood; earthquake, volcanic activity, and other earth movement; lightning; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; collapse; explosion; debris removal; demolition

occasioned by enforcement of Laws and Regulations; and water damage (other than that caused by flood).

- a. Such policy will include an exception that results in coverage for ensuing losses from physical damage or loss with respect to any defective workmanship, methods, design, or materials exclusions.
 - b. 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 will be provided through other insurance policies acceptable to Owner and Contractor.
2. 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.
3. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of contractors, engineers, and architects).
4. 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).
5. extend to cover damage or loss to insured property while in transit.
6. allow for the waiver of the insurer's subrogation rights, as set forth in this Contract.
7. allow for partial occupancy or use by Owner by endorsement, and without cancellation or lapse of coverage.
8. include performance/hot testing and start-up, if applicable.
9. be maintained in effect until the Work is complete, as set forth in Paragraph 15.06.D of the General Conditions, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first.
10. include as named insureds the Owner, Contractor, Subcontractors (of every tier), and any other individuals or entities required by this Contract to be insured under such builder's risk policy. For purposes of Paragraphs 6.04, 6.05, and 6.06 of the General Conditions, and this and all other corresponding Supplementary Conditions, the parties required to be insured will be referred to collectively as "insureds." In addition to Owner, Contractor, and Subcontractors of every tier, include as insureds the following:
 - a. Pioneer Plastics Corporation
MCC Acquisition LLC
Mid-Maine Waste Action Corp
Central Maine Power Company

11. include testing and/or site geotechnical services

- Supplement Paragraph 6.04 of the General Conditions with the following provisions:
 - H. *Builder's Risk and Other Property Insurance Deductibles*: The purchaser of any required builder's risk, installation floater, or other property insurance will be responsible for costs not covered because of the application of a policy deductible.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

SC – 7.03 *Labor; Working Hours*

- Delete Paragraph 7.03.C in its entirety, and insert the following:
 - C. In the absence of any Laws or Regulations to the contrary, Contractor may perform the Work on holidays, during any or all hours of the day, and on any or all days of the week, at Contractor's sole discretion.
- Add the following new paragraph immediately after Paragraph 7.03.C:
 - D. Owner shall be responsible for the cost of any overtime pay or other expense incurred by the Owner for Engineer's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day.

SC - 7.08 *Patent Fees and Royalties*

- Paragraph 7.08.B. is amended by adding the following at the end:

Owner's obligation of indemnification shall only extend to a claim brought by a third party.

SC - 7.17 *Contractor's General Warranty and Guarantee*

- Paragraph 7.17.D is amended by deleting "None" and replacing it with "Without limitation, none".

SC - 7.18 *Indemnification*

- Paragraph 7.18.A. is deleted and replaced with the following:

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, settlements, 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): (1) arising out of or relating

to the performance of the Work, but only to the extent arising in connection with any negligent act or omission or willful misconduct 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; (2) arising from any breach of this Agreement by the Contractor; or (3) any failure by the Contractor or any Subcontractor to pay all required employment taxes or any other withholding obligation to any taxing or governmental authority, to provide any benefit or to obtain workers' compensation insurance as may be required under applicable law, or to make any payment owed to any Subcontractor or material supplier in connection with the Work.

Neither the professional activities of the Owner/Engineer, nor the presence of the Owner/Engineer at the Site, shall impose any duty on the Owner/Engineer, nor shall it relieve the Contractor or any Subcontractor of any responsibility or duty of any nature whatsoever relating to the Work, including without limitation, to perform the Work in accordance with the Contract Documents and to comply with any health or safety precautions required by any regulatory agencies. The Owner/Engineer does not have authority to control any Contractor or its employees or Subcontractors in connection with the Work or any health or safety programs or procedures. The Contractor and all Subcontractors are solely responsible for Site safety.

ARTICLE 8—OTHER WORK AT THE SITE

SC - 8.03 *Legal Relationships*

- Delete the following sentence from Paragraph 8.03A:
 - A. 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.
- Paragraph 8.03.A. is amended by adding the following at the end:

Additionally, Contractor shall not be entitled to any adjustment of the Contract Price and Contract Times unless: (1) the Contractor provides the Engineer with written notice, which describes the delay, disruption or interference, within seventy-two (72) hours of the commencement of the delay, disruption or interference; and (2) an authorized representative of Owner accepts the Change Proposal and executes a Change Order.

- Paragraph 8.03.C. is amended by adding the following at the end:

Notwithstanding any other provision of this Paragraph, no settlement of any claim admitting liability of, or imposing duties or restrictions upon, any person or entity required to be indemnified above may be entered without the prior written consent of such person or entity, which shall not be unreasonably withheld.

ARTICLE 9—OWNER'S RESPONSIBILITIES

SC - 9.02 *Replacement of Engineer*

- Delete Paragraph 9.02.A in its entirety, and insert the following:

Owner may at its discretion appoint an engineer to replace Engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

SC - 9.04 *Pay When Due*

- Paragraph 9.04.A. is amended by adding the following at the end:

Notwithstanding any other provision of this Contract, Owner shall not be liable for any expense, fee or cost which exceeds amounts expressly set forth in this Contract for: (a) work performed or expenses incurred by the Contractor within the scope of the Work, unless such services are authorized by a Change Order; (b) additional services performed by the Contractor outside the scope of the Work unless such services are authorized by a Change Order or separate agreement; or (c) services of any third parties, including without limitation, any Subcontractor, except by separate agreement between Owner and the third parties.

SC - 9.09 *Limitations on Owner's Responsibilities*

- Paragraph 9.09.A. is amended by inserting "all requirements relating to the Work as specified in or required under any permit for the Project, or" between "with" and "Laws".

SC - 9.12 *Safety Programs*

- Paragraph 9.12.A. is amended by inserting "in writing" after "informed".

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

SC - 10.02 *Visits to Site*

- Paragraph 10.02.A. is amended by deleting "endeavor" and replacing it with "reasonable efforts".

SC - 10.03 *Resident Project Representative*

- Add the following new paragraphs immediately after Paragraph 10.03.B:
 - C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
 1. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
 2. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
 3. *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 Contractor's proper execution of the Work.
4. *Review of Work; Defective Work*
- a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective.
 - c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.
5. *Inspections and Tests*
- a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.
 - b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
6. *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.
7. *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.
8. *Shop Drawings and Samples:*
- a. Record date of receipt of Samples and approved Shop Drawings.
 - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
9. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
10. *Payment Requests:* Review Applications for Payment with Contractor.
11. *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 to Engineer 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, damage to property by fire or other causes, or the discovery of any Hazardous Environmental Condition.
- d. Contractor will be required to submit weekly payroll records to Owner for hourly, as well as salaried staff.

12. *Records:*

- a. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- b. Maintain records for use in preparing Project documentation.

13. *Completion*

- a. Participate in Engineer's visits regarding Substantial Completion.
- b. Assist in the preparation of a punch list of items to be completed or corrected.
- c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
- d. Observe whether items on the final punch list have been completed or corrected.

D. The RPR will 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 construction.
- 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. Authorize Owner to occupy the Project in whole or in part.
- 8. Accept Shop Drawings or Sample submittals from anyone other than Contractor.

SC - 10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- Paragraph 10.06.A. is amended by inserting "Subject to the limitations of this Contract," before "Engineer will render".

SC - 10.07 *Limitations on Engineer's Authority and Responsibilities*

- Paragraph 10.07.A. is amended by adding the following at the end:

Engineer shall not be, or purport to be, an agent of Owner or make any representation that Engineer has any authority to enter into any contract or obligation on behalf of Owner or settle any claim or interest of Owner.

ARTICLE 11—CHANGES TO THE CONTRACT

No Supplementary Conditions in this Article.

ARTICLE 12—CLAIMS

No Supplementary Conditions in this Article.

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

SC - 13.02 *Allowances*

- Paragraph 13.02.A is amended by deleting “sums” and replacing it with “unit price(s)”.

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

SC - 14.05 *Uncovering Work*

- Paragraph 14.05.C. is amended by inserting “Engineer shall promptly notify Owner of such determination and” between “others” and “then”.

SC - 14.07 *Owner May Correct Defective Work*

- Paragraph 14.07.B. is amended by deleting “related thereto”.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

SC - 15.03 *Substantial Completion*

- Add the following new subparagraph to Paragraph 15.03.B:
 1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to

agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

SC - 16.02 Owner May Terminate for Cause

- Paragraph 16.02.A.1. is amended by deleting “persistent” and replacing it with “repeated”.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

SC - 17.02 *Arbitration*

- Add the following new paragraph immediately after Paragraph 17.01.

17.02 *Arbitration*

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with the American Arbitration Association’s supplemental rules for Fixed Time and Cost Construction Arbitration. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the specific time required in Article 17, or if no specified time is applicable within a reasonable time after the matter in question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.
- C. The arbitrator(s) must be licensed engineers, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the Construction Arbitration Rules that contemplate in-person hearings. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.
- D. The Arbitrators will have the authority to allocate the costs of the arbitration process among the parties, but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- E. The award of the arbitrators must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.
- F. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party

to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.

- G. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
 - 1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration;
 - 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings;
 - 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 - 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- H. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.
- I. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

SC - 17.03 *Attorneys' Fees*

SC-17.03 Add the following new paragraph immediately after Paragraph 17.02.

17.03 *Attorneys' Fees*

- A. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 18—MISCELLANEOUS

No Supplementary Conditions in this Article.

**SECTION 01 11 00
SUMMARY OF WORK**

PART 1 GENERAL

1.1 SUMMARY

- A. This section includes:
- a) Furnish all labor, materials, and equipment required in accordance with provisions of the Contract Documents.
 - b) Completely coordinate work with all other trades.
 - c) Although such work may not be specifically indicated, furnish and install all miscellaneous items incidental to or necessary.

1.2 WORK COVERED BY CONTRACT

- A. The Work includes, but is not limited to the furnishing of the labor, materials, and equipment and the construction of the Littlefield Dam Removal Project as shown on Drawing Sheets 1 through 12, prepared by Inter-Fluve:
- a) Prepare access to staging area and work site;
 - b) Coordinate with utilities;
 - c) Provide traffic control;
 - d) Provide erosion, sedimentation, and pollution control;
 - e) Provide water control and flow management;
 - f) Clear and grub;
 - g) Perform demolition and dispose of material associated with:
 - 1) the Littlefield dam and appurtenances;
 - 2) the remnant dam;
 - 3) other debris;
 - h) Perform earthwork activities including excavating, stockpiling, sorting, filling and grading as shown in the Drawings;
 - i) Perform optional bedrock shaping;
 - j) Install seed and mulch at all disturbed areas;
 - k) Install restoration plantings; and
 - l) Decommission temporary works and restore the site.

1.3 CONTRACTOR'S USE OF PREMISES

- A. Contractor shall limit use of the premises for Work and storage and allow for work by other contractors/subcontractors.
- B. Contractor shall coordinate use of premises under direction of Owner and Engineer.

- C. Contractor assumes full responsibility for the protection and safekeeping of products and materials Contractor has stored on site.
- D. Contractor is responsible for surface water management and diversion and dewatering as necessary.
- E. Contractor shall move any stored products, or materials, under Contractor's responsibility, which interfere with operations of Owner or separate contractor/subcontractor.
- F. Contractor shall obtain and pay for the use of any additional storage or work areas if needed for Contractor operations.
- G. Contractor shall confine all materials storage, equipment storage and employee and subcontractor parking to areas within the project site.
- H. Contractor shall restore any areas used for materials storage, equipment storage, or employee and subcontractor parking to their original condition or better, unless specified otherwise.
- I. Contractor shall provide sanitary facilities within the designated staging area.

1.4 WORK SEQUENCE

- A. Contractor shall sequence operations to allow for efficient progress of Work.
- B. Construction must be fully complete, including all in-water work, within the time period described in Section 00 22 13 Notice to Contractors.
- C. Contractor is responsible for sequencing operations to perform all Work shown of the Drawings. Sequences other than those specified will be considered by Engineer, provided they assure completion of the work as shown on the Drawings.
- D. Contractor shall conduct all on site work during regular working hours which are defined as weekdays, 7:00 a.m. to 5:00 p.m., holidays excluded. Contractor may apply to work outside of regular working hours upon written approval from the Engineer and Owner.

1.5 LINES AND GRADES

- A. Construct river channel as shown on the Drawings to the tolerances described in Section 31 23 00 – Earthwork. Adjustments may be made if bedrock or boulders are encountered, pending acceptance by Engineer.
- B. Engineer will establish or designate control points for the Work as follows:
 - 1. The horizontal and vertical control designated by Engineer will consist of at least two monuments with horizontal and vertical coordinates.
- C. Provide all survey, layout, and measurement work required.
 - 1. Locate and protect control points prior to starting site work and preserve all permanent reference points during construction.
 - 2. Make no changes or relocations without prior written notice and approval by the Engineer.
 - 3. Report to Engineer when any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.

- 4. Require Professional Land Surveyor to replace Project control points and all Federal, State, City, County and private land monuments that may be lost or destroyed.
 - a) Establish replacements based on original survey control.
 - b) Comply with local and State requirements for monument replacement and restoration.
- D. Establish lines and levels, locate and lay out by instrumentation and similar appropriate means.
- E. From time to time, verify layouts by the same methods.
- F. Maintain a complete, accurate log of all control and survey work as it progresses.
- G. On request of the Engineer, submit documentation to verify accuracy of survey work.

1.6 REGULATORY REQUIREMENTS

- A. Comply with all Federal, State, and local laws, regulations, codes, permits, and ordinances applicable to the Work.
- B. References in the Contract Documents to local codes shall mean the City of Auburn and/or Androscoggin County, Maine.
- C. Other standards and codes that apply to the Work are designated in the Specifications.

1.7 ACCESS BY GOVERNMENT OFFICIALS

- A. Authorized representatives of government agencies shall at all times have access to the Work where it is in preparation or progress. Contractor shall provide proper facilities for access and inspection.

1.8 EASEMENTS AND RIGHTS-OF-WAY

- A. Confine construction operations to the immediate vicinity of the location indicated on Drawings and use due care in placing construction tools, equipment, excavated materials, materials and supplies, so as to cause the least possible damage to property and interference with traffic.
- B. Any work proposed outside the limits of active construction shown on the Drawings shall be reviewed in advance by the Owner, Property Owner, and Engineer and agreed to in writing prior to commencement.

1.9 FENCES

- A. Maintain all fences affected by the Work until completion of the Work. Erect temporary fencing per OSHA requirements.
- B. Keep gates closed and locked when not in use.

1.10 PROTECTION OF PUBLIC AND PRIVATE PROPERTY

- A. Protect, shore, brace, support, and maintain sheetpile, formwork, pipes, drains, and other materials that are part of or otherwise affected by construction operations.

- B. Restore to their original condition, pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with sod, and shrubs, in yards and parking areas, whether within or outside the work area or easement. Remove all gravel from staging areas.
- C. Use new materials for replacements of all items.
- D. Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, that may be caused by transporting equipment, materials, or workers to or from the Work or any part or site thereof, whether by Contractor or Contractor's subcontractors or suppliers.
- E. Make satisfactory and acceptable arrangements with Owner of, or the agency or authority having jurisdiction over, any damaged property concerning its repair, replacement, or payment of costs incurred in connection with the damage.
- F. In areas where the Contractor's operations are adjacent to or near a utility and such operations may cause damage which might result in considerable expense, loss, and inconvenience, the operation shall be suspended until all arrangements necessary for the protection thereof have been made by the Contractor.
- G. Notify all utility offices that may be affected by the construction at least 48 hours in advance. Before exposing, any utility having jurisdiction shall grant permission and may oversee the operation. Should service of any utility be interrupted due to the Contractor's operation, the proper authority shall be notified immediately. Contractor shall cooperate with the said authority in restoring the service as promptly as possible and shall bear any costs incurred.

1.11 MAINTENANCE AND TRAFFIC

- A. See Section 01 55 26 Traffic Control.
- B. Maintain entry and access roads. Roads and paved areas used by the Contractor shall be restored to pre-project or better condition prior to project completion.
- C. Conduct Work to interfere as little as possible with public travel, whether vehicular or pedestrian.
- D. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, provide and maintain suitable and safe bridges, detours, or other temporary measures for accommodation of public and private travel.
- E. Do not block access to any residence or business.
- F. Comply with all rules and regulations of the local, County or State authorities regarding the closures of public streets or highways to use of public traffic. No public road shall be closed to the public except by express permission of the public agency responsible for the road.
- G. Do not close any street or portion thereof without first notifying and receiving approval from the Fire Department and Police Department. Conduct operations to minimize interference with emergency vehicle access.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 22 00
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 SUMMARY

- A. This section describes the basis of measurement and payment for the contract items:
- B. Base Bid
 - 1. Mobilization and Demobilization
 - 2. Clearing and Grubbing
 - 3. Erosion, Sediment, and Pollution Control
 - 4. Access Development
 - 5. Water Control
 - 6. Dam Removal – Littlefield Dam
 - 7. Dam Removal – Remnant Dam
 - 8. Ledge Modification
 - 9. Fabric Slope Protection
 - 10. Potted Plants - Tree (1 gallon)
 - 11. Potted Plants - Shrubs (1 gallon)
 - 12. Live Stakes
 - 13. Seeding – Wetland Mix
 - 14. Seeding - Conservation Mix
- C. The bid price for each item of the contract shall cover all work shown on the Drawings and required by these Specifications and other contract documents. All costs in connection with the Work, including furnishing all materials, equipment and supplies; providing all construction, plants, equipment and tools, and performing all necessary labor and supervision to fully complete the Work, shall be included in the lump sum and unit prices bid. All work not specifically set forth as a pay item in the Construction Contract shall be considered as a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid.
- D. All estimated quantities provided in the Construction Contract are to give the Bidder an estimate of the effort required to fulfill the Contract. Owner does not represent that the listed description of lump sum pay items is either comprehensive or unique. The Contractor shall be responsible to make independent quantity estimates in order to determine the actual quantities necessary to construct the project as shown in the Drawings and described in the Specifications. The Contractor agrees not to make any claim for damages, anticipated profits or otherwise on account of any difference between the amount of work actually performed and materials actually furnished and the estimated amounts herein except as allowed in Section II Information to Bidders/General Conditions.

- E. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- F. Engineer reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 MEASUREMENT AND PAYMENT ITEMS

- A. Base Bid
 - 1. Mobilization and Demobilization. This Item includes all preparatory work and operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for necessary permits, submittals, notifications and other documentation including billboard for display; for the establishment of all offices or other facilities necessary for work on the project; for premiums on contract bonds and insurance for the Contract and for other work and operations that must be performed or costs incurred before beginning work on the project. This item also includes work and operations necessary to disband all mobilized items and clean up the site. The removal of all temporary access ways, signs, temporary fencing, and temporary facilities or works and the restoration of surfaces to an equal or better than existing condition shall also be included. Mobilization & Demobilization for subcontracted work is included. Access and Traffic Control, access development, and any temporary crossings needed for construction access and movements, will be incidental to the Item "Mobilization & Demobilization."
 - a) Measurement. No measurement for this Item will be made.
 - b) Payment. Payment for Mobilization & Demobilization will be made at the contract lump sum price of the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
 - 2. Clearing and Grubbing: This item includes, but is not limited to administrative time and vegetative clearing required to complete the work, including removing and stockpiling trees and shrubs from the work area for salvage, if necessary.
 - a) Measurement. No measurement for this Item will be made.
 - b) Payment. Payment for Clearing and Grubbing will be made at the contract lump sum price of the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
 - 3. Erosion, Sediment, and Pollution Control. This Item includes all labor, equipment and materials associated with Erosion, Sediment, & Pollution Control including but not limited to planning and submittals, silt fence, turbidity curtains, oil absorbing booms, and other best management practices for erosion, pollution, and water control necessary to complete the Work on the Project in compliance with all applicable laws, regulations, and permits.

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- a) Measurement. No measurement for this Item will be made.
 - b) Payment. Payment for Erosion, Sediment, & Pollution Control will be made at the contract lump sum price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
4. Access Development. This Item includes all administrative tasks, labor, equipment and materials associated with Access Development including but not limited to temporary gravel pads, timber mats, washing station, and all other items required to complete the Work.
- a) Measurement. No measurement for this Item will be made.
 - b) Payment. Payment for Access Development will be made at the contract lump sum price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
5. Water Control. This item includes all labor, equipment and materials associated with Water Control including but not limited to: dewatering, pumping and impoundment drawdown, stream diversion, bulk bags and other measures for control of water, and other best management practices for water control necessary to complete the Work on the Project in compliance with project permits.
- a) Measurement. No measurement for this item will be made.
 - b) Payment. Payment for Water Control will be made at the contract lump sum price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this item.
6. Dam Removal – Littlefield Dam. This Item includes all labor, equipment and materials associated with Dam Removal - Concrete Demolition required to remove the Littlefield Dam and appurtenances and other debris as shown on the Drawings, including offsite removal and disposal of demolition material in accordance with all applicable laws and regulations.
- a) Measurement. No measurement for this Item will be made.
 - b) Payment. Payment for this item will be made at the contract lump sum price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
7. Dam Removal - Remnant Dam. This Item includes all labor, equipment and materials associated with Dam Removal - Remnant Dam required to remove the Remnant Dam and appurtenances and other debris as shown on the Drawings, including offsite removal and disposal of demolition material in accordance with all applicable laws and regulations.
- a) Measurement. No measurement for this Item will be made.
 - b) Payment. Payment for this item will be made at the contract lump sum price in the Construction Contract, which shall be compensation in full

for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.

8. Ledge Modification. This item includes all labor, equipment and materials for the excavation, management, reuse, and offsite disposal, as applicable, of ledge or bedrock encountered in excavation, in accordance with the Drawings and Specifications. ~~“Ledge” or “bedrock” includes any natural compound, natural mixture and chemical element required to be excavated that, in the opinion of the Engineer, can be removed from its existing position and state only by blasting, drilling and blasting, wedging, drilling and wedging, wedging and breaking with power hand tools, or by extending the use of an approved excavating machine beyond normal and design wear and tear. No boulder, ledge, slab or other single piece of excavated material less than two cubic yards in total volume shall be considered to be rock unless, in the opinion of the Engineer, it must be removed from its existing position by one of the methods mentioned above.~~
 - a) Measurement. If it is determined that ledge encountered in the excavation is required to be removed, the Engineer will survey the pre-excavation bedrock before removal, and resurvey the subject area following bedrock removal. Measurement for Ledge Modification will be based on comparison of the pre- and post-bedrock removal surveys. The quantity for this item will be adjusted according to the amount of bedrock required to be removed in order to complete the work. Change in the quantity for this item will not be grounds for renegotiation of the base unit price for the Item.
 - b) Payment. Payment for Ledge Modification will be made at the Contract price per cubic yard. Reduction in the quantity for this item will not be grounds for renegotiation of the base unit price for the Item.
9. Fabric Slope Protection. Work includes, but is not limited to, administrative time, furnishing and installing, fabric, wood stakes, and wood staples, per the Contract Documents. Subgrade preparation, trenching to secure the Surface Fabric, and backfill to achieve design grades is incidental to this Item.
 - a) Measurement. Fabric Slope Protection shall be measured on the basis of per square yard installed and exposed (overlapping fabric and buried fabric not included in measurement), complete and in place.
 - b) Payment. Fabric Slope Protection shall be paid at the unit price per square yard of Surface Fabric installed, complete and in place, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this item.
10. Potted Plants - Trees (1-Gallon). This Item includes, but is not limited to, furnishing plant material, site preparation, hole excavation, planting, stabilizing, irrigation, rodent protection and other maintenance as shown in the Drawings or described in the Specifications. This item includes supplying all materials, equipment, labor, tools and incidentals to complete this work and the required warranty performance associated with Potted Plants - Trees (1-Gallon).
 - a) Measurement. This Item will be measured per each installed as shown in the planting areas on the Drawings and as specified.

- b) Payment. Payment for this Item shall be per live installed plant at the contract unit price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
11. Potted Plants - Shrub (1 Gallon). This Item includes, but is not limited to, furnishing plant material, site preparation, hole excavation, planting, stabilizing, irrigation, rodent protection and other maintenance as shown in the Drawings or described in the Specifications. This item includes supplying all materials, equipment, labor, tools and incidentals to complete this work and the required warranty performance associated with Potted Plants - Shrub (1 Gallon).
- a) Measurement. This Item will be measured per each installed as shown in the planting areas on the Drawings and as specified.
 - b) Payment. Payment for this Item shall be per live installed plant at the contract unit price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this Item.
12. Live Stakes. This item includes all labor, watering, equipment, materials, maintenance and warranties associated with Live Stakes.
- a) Measurement. This Item will be measured per each installed as shown in the planting areas on the Drawings and as specified.
 - b) Payment. Payment for this Item shall be per live installed stake at the contract unit price in the Construction Contract, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this item.
13. Seeding - Wetland Mix. This item includes all labor, watering, equipment, materials, maintenance and warranty associated with Transitional Revegetation Zone Seeding as described in the Drawings and in Section 32 90 00 - Site Plantings. Cover crop and mulch shall be incidental to this Item.
- a) Measurement. This Item will be measured per acre seeded as shown in the Drawings and Specifications. The Contractor shall submit invoices of seed materials purchased to demonstrate rates of seed application.
 - b) Payment. Payment for this Item will be made at the contract per acre price, which shall be compensation in full for all labor, materials, equipment and other expenses necessary to complete the work as specified for this item.
14. Seeding - Conservation Mix. This item includes all labor, watering, equipment, materials, maintenance and warranty associated with Transitional Revegetation Zone Seeding as described in the Drawings and in Section 32 90 00 - Site Plantings. Cover crop and mulch shall be incidental to this Item.
- a) Measurement. This Item will be measured per acre seeded as shown in the Drawings and Specifications. The Contractor shall submit invoices of seed materials purchased to demonstrate rates of seed application.
 - b) Payment. Payment for this Item will be made at the contract per acre price, which shall be compensation in full for all labor, materials,

equipment and other expenses necessary to complete the work as specified for this item.

END OF SECTION

SECTION 01 26 00
CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

- A. Engineer will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on Work Change Directive.

1.3 PROPOSAL REQUESTS

- A. Engineer-Initiated Proposal Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
1. Proposal Requests issued by the Engineer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 2. Within 5 days after receipt of Change Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 3. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 4. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to the Engineer.
1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.

3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
5. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

1.4 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Engineer will issue a Change Order for signatures of Owner and Contractor on Change Order form.

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Work Change Directive: Engineer may issue a Work Change Directive on EJCDC Document C-940. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Construction Change Directive contains a complete description of change in the Work. It also designates a method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 35 13
SPECIAL CONDITIONS**PART 1 GENERAL****1.1 DEFINITIONS**

- A. “Owner” – City of Auburn
- B. “Engineer” or “Resident Project Representative” – Inter-Fluve, Inc.

1.2 PRECONSTRUCTION CONFERENCE

- A. A preconstruction conference shall be held at the project site within 4 weeks after award of the Contract. Owner will notify the Contractor as to the date and time of the conference upon contract award. Contractor’s Project Manager and Project Superintendent, Owner’s technical representative, Engineer, and Contractor’s Subcontractor Representatives shall attend. Project design intent, materials requirements, construction approach and sequencing, materials sources, construction methods, and scheduling will be reviewed and any questions or procedures will be clarified.
- B. The agenda of the preconstruction meeting shall incorporate the following items:
 - 1. Distribution and discussion of:
 - a) List of Subcontractors.
 - b) Projected Construction Schedules.
 - c) Critical work sequencing.
 - 2. Project coordination:
 - a) Designation of responsible personnel.
 - 3. Procedures and processing of the following:
 - a) Submittals.
 - b) Work Change Directives.
 - c) Requests for Information.
 - d) Deactivation Requests.
 - e) Change Orders.
 - f) Applications for Payment.
 - g) Permit Requirements.
 - h) Adequacy of distribution of Contract Documents.
 - i) Procedures for maintaining Record Documents.
 - 4. Use of premises:
 - a) Office, work and storage areas.
 - b) Owner’s requirements

- c) Construction facilities and construction aids.
- d) Temporary utilities.
- e) Safety and first-aid procedures.
- f) Housekeeping procedures.

1.3 ACCESS AND SEQUENCING CONSTRAINTS AND DEPENDENCIES

- A. Primary access to the project site shall be via Pionite Road in coordination with Pioneer Plastics, as shown on the Drawings. Prior authorization from all property owners along the access route, including Central Maine Power Company and Mid Maine Waste Action Corp, will be obtained by the Owner, in writing, prior to any use or disturbance of the property.
- B. Alternate access to the project site shall be via Martindale Country Club golf course. Prior authorization from the property owner must be obtained by the Contractor, in writing, prior to any use or disturbance of the property.

1.4 AIR, LAND AND WATER POLLUTION

- A. The Contractor is advised that several permits are required for the Project and are listed in Section 00 31 46 Permits and included in Appendix A of the Specifications. The Contractor is fully responsible for complying with terms and conditions of these permits.
- B. The Contractor is responsible for submitting an application for and receiving coverage under the Maine Pollution Discharge Elimination System (MPDES) Maine Construction General Permit (MCGP), including submittal of Notice of Intent (NOI) and any associated required plan or document submittals, payment of fees, and receipt of approvals. The Contractor shall be solely responsible for complying with the requirements of the General Permit. See also 31 25 00 - Erosion, Pollution, and Water Control.
- C. Pollution of natural resources of air, land, and water by operations under this Contract shall be prevented, controlled, and abated in accordance with the rules, regulations, and standards adopted and established by the State of Maine, the United States Environmental Protection Agency and in accordance with the permits listed in Section 00 31 46 – Permits and attached in Appendix A.
- D. The Contractor shall furnish, install and maintain temporary and permanent erosion and sediment control as described in 31 25 00 - Erosion, Pollution and Water Control and shown in the Drawings, in accordance with the provisions of the Maine Pollution Discharge Elimination System (MPDES) Maine Construction General Permit (MCGP).
- E. The Contractor shall apply for and receive coverage under the above-mentioned permit by submitting a Notice of Intent, coordinating Owner signatures, paying the application fee, and implementing the permit.
- F. The Contractor shall be solely responsible for complying with the requirements of the Construction General Permit.
- G. The Contractor shall be responsible for providing all inspections, documentation, record keeping, maintenance, remedial actions, repairs required by the permit. All inspections, maintenance, and records required in the General Permit shall be the sole responsibility of the Contractor. The word "Permittee" in these referenced paragraphs shall mean

"Contractor". Standard forms for logging all required inspection and maintenance activities shall be used by the Contractor. All inspection and maintenance forms used on this Project shall be turned over to the Engineer in accordance with the inspection schedule outlined in the General Permit.

- H. The Contractor shall have all logs, documentation, inspection reports on site for Engineer's review and shall post the permit on site. The Contractor shall immediately rectify any shortcomings noted by the Engineer. All meetings with the state agencies or any local authority shall be attended by both the Engineer and the Contractor or their representatives. No work required by said entities, and for which the Contractor would request additional compensation, shall be started without approval from the Engineer. No work required by said entities and for which the changes will impact the design or requirements of the Contract documents or impact traffic shall be started without approval from the Engineer.
- I. The Contractor shall immediately notify the Engineer of any site visits by Permitting Authorities performed in accordance with the MPDES MCGP.
- J. If the Contractor fails to perform the requirements as listed in the applicable permits, the Engineer will issue a Work Order detailing the required action. The Contractor shall start the required action within twenty-four (24) hours of receipt of the Work Order and continue the required action until the Project is brought into compliance with the permit. Failure to perform the required action as specified, shall subject the Contractor to a \$1000/calendar day deduction.
- K. The Contractor shall review and abide by the instructions contained in the permit package. The Contractor shall indemnify and hold the Owner harmless for any fines or sanctions caused by the Contractor's actions or inactions regarding compliance with the permit or erosion control provisions of the Contract Documents.

1.5 PROJECT SIGNS

- A. Furnish and install Contractor's standard sign approved by Owner.
 - 1. Install in location approved by Owner.
- B. Prior to any construction activity, including access, the Contractor shall install a project information sign adjacent to Pionite Road.
 - 1. The sign layout shall be provided to the Owner for review by the Contractor in electronic format of a quality suitable for printing.
 - 2. The sign shall be produced and erected utilizing durable materials and methods of construction to withstand all weather conditions and potential inundation.
- C. Prior to any construction activity, including access, a sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the text required by any and all of the project permits.
- D. Signs not listed in this Specification permitted only upon approval of Owner.

1.6 SUBMITTALS

- A. Construction Schedule
 - 1. Prior to the preconstruction conference, the Contractor shall submit to the Engineer and Owner a schedule illustrating in bar chart form the anticipated commencement date and duration of each of the major work tasks. The schedule should address the phasing of construction in a manner that will provide good project coordination. The Contractor will be required to update or modify the written construction schedule as necessary to accurately reflect the rate and progress on the project.
- B. Construction Operations Plan (Section 01 71 13 – Mobilization and Demobilization)
 - 1. Itemized list of Mobilization Costs (Section 01 71 13 – Mobilization and Demobilization)
 - 2. Traffic Control Plan (Section 01 55 26 – Traffic Control)
 - 3. Demolition Plan (Section 02 40 00 – Demolition)
 - 4. Control of Water Plan (Section 31 25 00- Erosion, Pollution and Water Control)
 - 5. Spill Prevention Plan (Section 31 25 00 – Erosion, Pollution and Water Control)
 - 6. Final Draft of the Storm Water Pollution Prevention Plan (Section 31 25 00- Erosion, Pollution and Water Control)
- C. Materials Certifications and Testing Submittals as specified in the respective sections of these Specifications.
- D. Planting Operations Plan (Section 32 90 00- Site Plantings)
- E. 3-Year Plant Maintenance Plan (Section 32 90 00 – Site Plantings)

- F. The Contractor shall make the following submittals to the Owner and the Engineer for their evaluation consistent with the timing indicated below:

Submittal	Required Timing and Description
Construction Schedule	To accompany bid; updated schedule submitted prior to the preconstruction conference.
Construction Operations Plan	Submitted prior to preconstruction conference. Accepted plan required prior to Mobilization.
Itemized List of Mobilization Costs	Submitted prior to preconstruction conference.
Traffic Control Plan	Submitted prior to preconstruction conference. Accepted plan required prior to Mobilization.
Demolition Plan	Submitted prior to preconstruction conference. Accepted plan required prior to Mobilization.
Control of Water Plan	Submitted prior to preconstruction conference. Accepted plan required prior to Mobilization.
Spill Prevention Plan	Submitted prior to preconstruction conference. Accepted plan required prior to Mobilization.
Storm Water Pollution Prevention Plan (SWPPP)	Submitted prior to preconstruction conference.
Materials Certifications and Testing Submittals	Accepted submittal required prior to delivery of material to site.
Planting Operations Plan	Accepted plan required prior to Mobilization.
3-Year Plant Maintenance Plan	Accepted plan required prior to Mobilization.

1.7 PROCUREMENT

- A. This project is funded by the Infrastructure Investment and Jobs Act("IIJA"), and as such is subject to certain requirements, so please be advised while sourcing materials for pricing of the following special conditions:
1. Required Use of American Iron, Steel, Manufactured Products, and Construction Materials Pursuant to the Infrastructure Investment and Jobs Act("IIJA"), Pub.L. No. 117-58, which includes the Build American, Buy American (BABA) Act, Pub. L. No. 117-58, §§ 70901-52 and OMB M-22-11, recipients of an award of Federal financial assistance from the Department of Commerce (DOC) are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:
 - a) all iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
 - b) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the

manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and

c) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

1.8 SURVEY CONTROL

- A. Survey control has been established at the site and is noted on the Drawings. All subsequent surveying needed for or incidental to the layout or construction staking shall be the responsibility of the Contractor. Stakes and markers shall be provided by the Contractor as necessary to control the work and assure construction is in conformance to the Drawings and Specifications, and as otherwise directed by the Engineer. Following staking of the Work, the Engineer may make field-based adjustments to the layout as necessary to meet current site conditions. Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be made therefore.

1.9 DUST AND SPILL CONTROL

- A. The Contractor shall at all times limit migration of dust away from the project site by means of sweeping, sprinkling or other approved methods. The Contractor shall be responsible for the alleviation or prevention of dust nuisance caused by his own operations. In order to minimize traffic hazards and public nuisance arising out of the Contractor's operations, Contractor shall ensure that adjacent properties and improved surfaces of surrounding streets stay free and clean of silt, tracked mud, dust, etc., coming from or in any way related to construction. At a minimum, such cleanup shall occur prior to termination of each day's work. The Engineer may determine that such a traffic hazard or public nuisance requires an immediate cleanup. Such immediate corrective measures shall be at the expense of the Contractor. Full compensation for any water or other method used for dust and spill control required of this section, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed therefore.

1.10 CONTRACTOR'S SUPERINTENDENT'S FIELD OFFICE

- A. Equipment: Cell phone and sanitary facilities.

- B. Maintain complete field file of shop drawings, Permits, Operations and Maintenance Manuals, posted Contract Drawings and Specifications, and other files of field operations including provisions for maintaining “As Recorded Drawings.”

1.11 DRAWINGS AND CONTRACT DOCUMENTS FOR CONTRACTOR USE

- A. One copy of the Contract Documents in portable document format (PDF) and one CADD file.
- B. The Contractor shall pick up all “no-charge” documents within 14 days from date of Notice to Proceed.

1.12 ORDER OF CONSTRUCTION AND CONSTRUCTION SCHEDULE

- A. The submitted construction schedule shall account for schedule of subcontracts and include proper sequence of construction, various crafts, purchasing time, submittals approval, material delivery, and similar time-consuming factors. Show in schedule as a minimum, earliest starting, earliest completion, latest starting, latest finish, and free and total float for each task or item. Evaluate schedule not less than weekly. Update, correct, and rerun schedule and submit to Engineer to show rescheduling necessary to reflect true job conditions. When shortening of various time intervals is necessary to correct for behind schedule conditions, indicate steps to implement and accomplish work in shortest schedule. Information shall be submitted to Engineer in writing with revised schedule. Contractor shall refer to the construction sequence provided in the Drawings.
- B. If Contractor does not take necessary action to accomplish work according to schedule, they may be ordered by the Engineer in writing to take necessary and timely action to improve work progress. Order may require increased work forces, extra equipment, extra shifts or other action as necessary. Should Contractor refuse or neglect to take such action authorized, under provisions of this contract, Owner may take necessary actions including, but not necessarily limited to, withholding of payment and termination of contract.

1.13 PROJECT MEETINGS

- A. The Engineer shall conduct construction meetings involving:
 - 1. Contractor’s project manager.
 - 2. Contractor’s project superintendent.
 - 3. Owner’s designated representative(s).
 - 4. Engineer’s designated representative(s).
 - 5. Contractor’s subcontractors as appropriate to the work in progress.
 - 6. Local, state, and federal agency staff as appropriate to the work in progress.
- B. Conduct meetings weekly.
- C. The Engineer shall take meeting minutes and submit copies of meeting minutes to participants and designated recipients identified at the Preconstruction Conference. Corrections, additions or deletions to the minutes shall be noted and addressed at the following meeting.

- D. The Engineer shall coordinate and schedule the weekly meetings for a convenient day and time to be agreed upon by the attendees.
- E. The Engineer shall have available at each meeting full chronological file of all previous meeting minutes.

1.14 SPECIAL CONSIDERATIONS

- A. Contractor shall be responsible for negotiations of any waivers or alternate arrangements required to enable transportation of materials to the site.
- B. Contractor shall maintain conditions of access road to site such that access is not hindered as the result of construction related deterioration.
- C. Contractor shall note the following time-of-year restrictions included in the permits:
 - 1. In-water work should occur between July 15 and September 30. Refer to Section 00 31 46 Permits.
- D. Contractor shall monitor weather forecasts and water levels to protect equipment and site from high water and flooding.
- E. Contractor shall track all labor hours worked per project and submit total number of labor hours along with their monthly payment application for processing.

1.15 HISTORICAL AND ARCHAEOLOGICAL

- A. The Contractor is advised that the project area potentially contains archaeological or historical objects that may have significance from a historical or scientific standpoint.
- B. If during the course of construction, evidence of deposits of historical or archaeological interest is found, the Contractor shall cease operations affecting the find and shall notify the Engineer. No further disturbance of the deposits shall ensue until the Contractor has been notified by the Engineer that the Contractor may proceed.
- C. The Contractor's schedule shall anticipate up to two (2) working days of delays in the event that evidence of deposits of historical or archaeological interest is found. This 2-day cumulative delay is already anticipated in the completion date/working days and no additional time will be allowed. All work and consequential delay costs for this required schedule flexibility shall be considered incidental to the Contract and no additional measurement or payment will be made. In the event that archaeological materials are encountered that necessitate changed conditions, or if the cumulative delay is greater than two (2) working days, then compensation to the Contractor for lost time or changes in construction resulting from the find shall be determined in accordance with changed or extra work provisions of the Contract Documents.

1.16 ADDRESSES

- A. All notices and letters, and communications directed to Owner shall be addressed and delivered to City of Auburn, 60 Court St, Auburn, ME 04210, Attn: Dan Goyette (dgoyette@auburnmaine.gov). Notice shall also be sent via email when any hard copies of documents are sent to the Owner via a postal service.
- B. All notices, letters and communication directed to Engineer shall be addressed and delivered to Inter-Fluve, 181 Main Street, 2nd Floor, Damariscotta, ME 04543 or in electronic format to Keith Kantack at Inter-Fluve, kkantack@interfluve.com
- C. The business addresses of Contractor given in the Bid Form and Contractor's office at the site of the Work are hereby designated as the places to which all notices, letters, and other communication to Contractor will be delivered.
- D. Either Owner, Contractor, or Engineer may change its address at any time by an instrument in writing delivered to the other two.

PART 2 PRODUCTS (NOT USED)**PART 3 EXECUTION (NOT USED)****END OF SECTION**

**SECTION 01 55 26
TRAFFIC CONTROL****PART 1 GENERAL****1.1 SUMMARY**

- A. The Contractor shall be wholly responsible for the adequacy of traffic control and as such should provide any additional traffic control measures necessary for safety and compliance with applicable laws, and regulations.
- B. Traffic Control shall consist of installing, maintaining and removing signs, lights, barricades and other traffic safety and directive devices as needed for the convenience, safety and direction of public vehicular and pedestrian traffic and furnish competent flaggers and/or law enforcement staff as required by law and as needed for the convenience, safety and direction of public vehicular and pedestrian traffic.
- C. Construction traffic shall be restricted to regular working hours, defined here as Monday through Friday between 7:00am and 5:00pm, unless local ordinances require shorter working hour periods. The Contractor may apply to work outside of regular working hours upon written approval from the Engineer and Owner.

1.2 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. The Federal Highway Association's Manual on Uniform Traffic Control Devices (MUTCD).

1.3 SUBMITTALS

- A. Traffic Control Plan
 - 1. The Contractor shall provide an intended traffic control plan to ensure site and public safety associated with movement of equipment, materials, and forces entering and exiting the site and to promote general awareness of the construction activity in the Town, to be included in the Construction Operations Plan.
 - 2. Traffic Control shall detail the Contractor's methods of installing, maintaining and removing signs, lights, barricades and other traffic safety and directive devices as needed for the convenience, safety and direction of public vehicular and pedestrian traffic and furnish competent flaggers as needed for the convenience, safety and direction of public vehicular and pedestrian traffic.
 - 3. Vehicular traffic shall be maintained along the right of way throughout the project. Sequencing of the project shall be described in the Construction Operations Plan so as to minimize disturbance to vehicular traffic.
 - 4. Construction vehicles may enter the site at the access locations, but shall not consider the road to be within the limits of disturbance for regular use by the Contractor.

PART 2 PRODUCTS**2.1 MATERIALS**

- A. All temporary traffic signs used for maintenance of traffic shall be in accordance with the latest edition of the FHWA-MUTCD, including reflectivity requirements.
- B. All traffic control devices shall meet or exceed crash worthiness requirements.

PART 1 EXECUTION**3.1 MAINTENANCE AND TRAFFIC**

- A. The Contractor will inspect the maintenance of traffic material and application on a routine basis. All deficiencies shall be corrected promptly.
- B. The Contractor shall be responsible to ensure that safety of the public and the work crew is maintained at all times throughout the term of the contract. Motorists and other users of the road shall be guided in a clear and positive manner while approaching and passing through construction work and equipment areas. This includes actions such as the following;
 - 1. Maintenance of site closures during construction and minimization of dust and noise in areas adjacent to the project site.
 - 2. Provision of appropriate temporary signage is required along the approach to and at all trail and roadway closure points, construction ingress and egress locations, and all other trail access points to the project area. Contractor and Owner will confirm signage requirements at the preconstruction meeting.
 - 3. Provision of temporary construction fencing around the dam removal, grading and channel restoration work occurring within 100ft of trail, parking, or other public facilities.
 - 4. Provision of flaggers and/or law enforcement staff, as required by law, during periods of frequent ingress and egress to the site, including during hauling operations.
 - 5. Engineer reserves the right to require the Contractor to supply at no additional cost supplemental signage and flaggers if it is determined that the installed measures do not satisfactorily ensure public safety.
 - 6. Coordination with law enforcement staff as required
- C. The Contractor shall install (prior to beginning construction) and maintain (during construction) all necessary traffic control devices during hours of construction and at all other times in accordance with the methods of traffic control detailed in these notes, the enclosed Specifications, and the FHWA-MUTCD.
- D. Any damage to existing structures, signs, posts or hardware as a result of operations during construction shall be repaired and/or replaced at the Contractor's expense.
- E. The Contractor will be held responsible for all damage to the Work from traffic, pedestrians, animals, or any other cause, due to lack of adequate protective devices.
- F. All signs that are not applicable due to temporary traffic control conditions shall be relocated, when necessary, completely covered with an opaque material, or removed with

approval from the Engineer. All applicable signs shall be maintained during construction unless otherwise specified by the Engineer or as noted in the contract documents. All signs shall be properly redisplayed to traffic as soon as conditions warrant. All sign locations may be adjusted to fit field conditions as approved by the Engineer.

- G. Any Contractor-requested modifications, or additions to this Traffic Control Plan must be accepted by the Engineer.
- H. Maintain entry and access roads.
- I. Conduct Work to interfere as little as possible with public travel, whether vehicular or pedestrian.
 - 1. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, provide and maintain suitable and safe bridges, detours, or other temporary measures for accommodation of public and private travel.
 - 2. Do not block access to any residence or business.
 - 3. Comply with all rules and regulations of the local, County or State authorities regarding the closures of public streets or highways to use of public traffic. No public road shall be closed to the public except by express permission of the public agency responsible for the road.
- J. Do not close any street or portion thereof. Conduct operations to minimize interference with emergency vehicle access.

END OF SECTION

SECTION 01 71 13
MOBILIZATION AND DEMOBILIZATION

PART 1 GENERAL

1.1 MOBILIZATION

- A. Mobilization shall consist of preparatory work and operations performed by the Contractor, including, but not limited to, those necessary for the transportation and movement of personnel, traffic control, equipment, supplies, and incidentals to and from the project site; for necessary permits, submittals, notifications and other documentation including billboard for display; for the establishment of all offices and other facilities necessary for work on the project; for premium on contract bonds; for insurance for the Contract; and for other work and operations that must be performed or costs incurred before beginning Work on the various items on the project site and after the Work is completed.
- B. Mobilization shall also include coordination with utilities, construction of temporary access ways; construction of any temporary crossings needed to complete the Work; temporary fencing; and the necessary preparatory work required to allow for the safe and stable movement of all vehicles that are required to construct the improvements shown.
- C. Mobilization costs for subcontracted work shall be considered to be included.

1.2 DEMOBILIZATION

- A. Demobilization shall consist of work and operations necessary to disband all mobilized items and clean up the site. The removal of all temporary access ways, signs, temporary fencing, and temporary facilities or works and the restoration of surfaces to an equal or better than existing condition shall also be included as part of Demobilization.
- B. Demobilization costs for subcontracted work shall be considered to be included.

1.3 SUBMITTALS

- A. Refer also to Section 01 35 13 Special Conditions.
- B. Itemized list of Mobilization costs.
- C. Construction Operations Plan
 - 1. Prior to the preconstruction conference, the Contractor shall submit to the Engineer and Owner a Construction Operations Plan (COP) that adheres to all permits and permit conditions. The plan will detail the Contractor's approach to the project, including the temporary access design, updated construction sequencing plan, Control of Water Plan, Stormwater Pollution Prevention Plan, Spill Prevention Plan, Traffic Control Plan, Demolition Plan, and other details related to the Contractor's anticipated means and methods. The Construction Operations Plan shall be reviewed by the Engineer. The Contractor shall not mobilize equipment to the site before the Construction Operations Plan is reviewed by the Engineer and accepted by the Owner. The Contractor shall not mobilize equipment before all pre-construction permit conditions are met.

2. Construction Schedule – The Contractor shall provide a final intended construction schedule for review, to be included in the COP.
 3. Traffic Control Plan – The Contractor shall provide an intended traffic control plan to ensure site and public safety associated with movement of equipment, materials, and forces entering and exiting the site and to promote general awareness of the construction activity in the Town, to be included in the COP.
 4. Demolition Plan – The Contractor shall describe through narrative and figures the approach for removing the dam and associated infrastructure as described in the Drawings. The Contractor shall describe the means and methods for this demolition as well as identify the disposal location for demolished materials.
 5. Control of Water Plan – The Contractor shall describe through narrative and figures the approach to the required stream diversion, local dewatering, and erosion and turbidity control measures, including sequencing and intended means and methods. The Contractor should also demonstrate the anticipated capacities of water conveyance measures used for stream diversion, and demonstrate that the planned capacities are adequate for the anticipated streamflow during the period of construction. Refer to Section 31 25 00 – Erosion, Pollution, and Water Control.
 6. Storm Water Pollution Prevention Plan (SWPPP)– The Contractor shall include the SWPPP in the COP. The SWPPP shall include a Spill Prevention Plan. The SWPPP shall include the information required for compliance with the Maine Pollution Discharge Elimination System (MPDES) Construction General Permit (CGP). Refer to Section 31 25 00 – Erosion, Pollution, and Water Control.
- B. Materials certifications as indicated the respective specifications and itemized in Section 01 35 13 Special Conditions.
- C. Planting Operations Plan (Refer to 32 90 00 Site Plantings).
- D. 3-Year Plant Maintenance Plan (Refer to 32 90 00 Site Plantings).

PART 2 PRODUCTS

2.1 MATERIALS

- A. As part of Mobilization, the Contractor shall provide safe storage for materials intended for the Work until such materials have been incorporated in the completed project.

PART 1 EXECUTION

3.1 SITE PREPARATION AND SCHEDULING

- A. Contractor shall provide a billboard for displaying the project permits.
- B. The Contractor shall adhere to all time-of-year (TOY) restrictions set forth in the project permits, including all in-water work associated with the channel restoration. Work may continue in these areas during the TOY restrictions if measures are implemented to fully comply with all permit requirements.

END OF SECTION

**SECTION 02 40 00
DEMOLITION****PART 1 GENERAL****1.1 SUMMARY**

- A. Work under this section includes:
 - 1. Demolition, removal, and off-site disposal of all materials not earmarked for reuse, including concrete, stone, mortar, metal, plastic, wood, appurtenances, and associated subsurface structures within the project limits.
 - 2. Loading of materials not earmarked for reuse onto trucks and disposing of them at an offsite location in compliance with all applicable laws and regulations.

1.2 SUBMITTALS

- A. Prior to beginning any work of this Section, the Contractor shall submit a demolition plan as part of the Construction Operations Plan (Refer to 01 71 13 Mobilization and Demobilization and 01 35 13 Special Conditions) to the Owner and Engineer for approval. The Plan shall detail intended sequence, means and methods for demolition of the Littlefield Dam structure and appurtenances, the remnant dam, and other debris within the limits shown on the Drawings.

PART 2 PRODUCTS (NOT USED)**PART 3 EXECUTION****3.1 EXAMINATION**

- A. The Owner and Engineer do not guarantee that the true existing condition is reflected on the Drawings. The Contractor is responsible for understanding the existing conditions at the site.
- B. Ground-truth the existing conditions and correlate with project requirements to determine extent of structure demolition required.
- C. If unanticipated mechanical, electrical, or structural elements are encountered, investigate and measure the nature and extent of the element. Notify the Engineer to coordinate a resolution prior to continuing with the work.

3.2 PROTECTION AND SITE PREPARATION

- A. Prevailing weather conditions and weather forecast shall be considered. Demolition work shall not proceed when extreme weather conditions constitute a hazard to the workers and Site.
- B. Refer to Section 31 25 00 Erosion, Pollution, and Water Control for additional protection and site preparation measures.

3.3 DEMOLITION

- A. The Contractor shall fully demolish and remove Littlefield Dam and the remnant dam and appurtenances as shown on the Drawings, described herein, or as otherwise indicated. The Contractor shall dispose materials at an approved offsite receiving facility in compliance with all applicable laws, ordinances, and rules.
- B. Use of explosives is not allowed.
- C. The Contractor shall perform the demolition in a controlled manner, with due regard to the safety and preservation of residents and residential property, pedestrians, resident wildlife, Engineer and staff, adjacent natural resources, and their own forces.
- D. The Contractor shall use demolition methods that will allow complete removal of demolition debris from the site. The Contractor shall prevent demolition debris or dust from entering areas outside of the limits of disturbance as shown on the Drawings.
- E. The Contractor shall use demolition methods that will not result in degradation or impairment of the existing natural resources and/or environmental qualities, including but not limited to water, soil, or air quality.

3.4 REMOVAL

- A. Concrete and other non-salvage materials shall be loaded onto trucks and disposed of at an offsite location in compliance with all applicable laws and regulations.
- B. The Contractor shall perform breaking and debris size reduction as necessary for loading into transport vehicles and offsite disposal. All concrete and associated materials within the extents of dam demolition and within other excavation and clearing areas within the limits of disturbance shall be removed in their entirety.
- C. All structures slated for removal shall be removed as shown on the Drawings, leaving the native grade exposed. If the resulting grade conditions are deemed unsuitable to the Engineer, excavate and remove a minimum of 1.0 foot below grade and replace with approved material.

3.5 RESTORATION

- A. Upon completion of work, the Contractor shall remove debris, trim surfaces, and leave work sites clean to a condition satisfactory to the Engineer.

END OF SECTION

**SECTION 31 10 00
CLEARING AND GRUBBING**

PART 1 GENERAL

1.1 SUMMARY

- A. Selective clearing and grubbing may be required in specific areas to perform the work. Review and coordinate clearing and grubbing activities on-site with the Engineer prior to initiation of clearing and grubbing.
- B. Clearing and Grubbing shall consist of:
 - 1. Clearing and grubbing operations as required to install the work shown on the Drawings.
 - 2. Removal and disposal of trees and shrubs as described herein and on the Drawings.

PART 2 PRODUCTS

2.1 CLEARED DEBRIS

- A. The Contractor shall remove cleared material from the site and shall dispose the material in an approved located according to applicable laws and regulations.

PART 3 EXECUTION

3.1 PREPARATION

- A. Protect existing surface and subsurface features on-site and adjacent to site as follows:
 - 1. Protect existing trees and other vegetation that do not interfere with the Work.
 - 2. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing items indicated to remain in place.
 - 3. Protect and maintain bench marks, monuments or other established reference points and property corners. If disturbed or destroyed, replace at Contractor's expense to full satisfaction of the Engineer and controlling agency.
 - 4. Verify location of utilities. Omission or inclusion of utility items in the Drawings does not constitute non-existence or definite location. Secure and examine local utility records for location data and call Dig Safe at 1-888-DIG-SAFE (1-888-344-7233) or 811.
 - a) Take necessary precautions to protect existing utilities from damage due to any construction activity.
 - b) Repair damages to utility items at Contractor's expense.
 - c) In case of damage, notify Engineer at once so required protective measures may be taken.
 - 5. Maintain free of damage, existing sidewalks, structures, and pavement, not indicated to be removed. Any item known or unknown or not properly located

that is inadvertently damaged shall be repaired to original condition. All repairs to be made and paid for by Contractor.

6. Provide full access to public and private premises, fire hydrants, street crossings, sidewalks and other points as designated by Engineer to prevent interruption of travel.
 7. Maintain stockpiles and excavations in such a manner to prevent inconvenience or damage to structures on-site or on adjoining property. Do not smother trees by stockpiling construction materials or excavated materials within drip line.
 8. Avoid foot or vehicular traffic or parking of vehicles within drip line.
 9. Avoid surcharge or excavation procedures which can result in heaving, caving, or slides.
- B. Repair or replace trees and vegetation damaged by construction operations.
1. Repair to be performed by Arborist certified by the Maine Arborists Association or the International Society of Arboriculture.
 2. Remove trees which cannot be repaired or restored to full growth status.
 3. Replace removed trees with new trees of minimum 4-inch caliper.

1.2 SITE CLEARING

- A. Clearing and Grubbing shall be limited to extents of Earthwork and limits of the access alignments and staging areas as indicated on the Drawings. Contractor and Engineer shall review and confirm the limits of Clearing and Grubbing prior to commencement of the Work, and shall clearly mark woody vegetation and trees to be maintained, to be removed, and to be salvaged as part of the clearing operation.
1. Remove and grub trees, shrubs, brush, downed timber, rotten wood, heavy growth of grass and weeds, vines, rubbish, and debris within the limits of excavation.
- B. Noxious, non-native, and invasive vegetative species—including, but not limited to, Japanese knotweed, Phragmites, black swallow-wort, gray willow, multiflora rose, and any other species identified in the invasive species management plan—within the clearing limits shall be removed from the site and disposed in accordance with applicable best practices and regulations.
- C. All trees not removed in clearing and grubbing operations shall be protected from root and bark damage, soil compaction, and smothering of roots and trunks.
- D. Disposal of Waste Materials:
1. Cleared materials and waste materials not designated for reuse shall be disposed of off-site by the Contractor in accordance with applicable regulations.
 2. Burning, as a means of waste disposal, is not permitted.

1.3 FIELD QUALITY CONTROL

- A. Upon completion of the site clearing, obtain Engineer's acceptance of the extent of clearing.

END OF SECTION

SECTION 31 23 00
EARTHWORK**PART 1 GENERAL****1.1 SUMMARY**

- A. Supply of all materials, labor, tools, and equipment to grade channel for fish passage enhancement as shown on the Drawings and described in these Specifications.
- B. Work under this section includes:
 - 1. Excavation and offsite disposal of Bedrock;
 - 2. Excavation and salvage/reuse of earthen material associated with the demolition and excavation of the Littlefield Dam;
 - 3. Excavation and salvage/reuse of material within the Limit of Work;
 - 4. Grading to achieve the lines and grades shown on the Drawings;

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM D422, Standard Test Method of Particle-Size Analysis for Soils
 - 2. ASTM D698, Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft³).
 - 3. ASTM D1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³(2,700 Kn-m/m)).
 - 4. ASTM D2487, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System.)
 - 5. ASTM D4253, Standard Test Methods for Maximum Index Density of Soils Using a Vibratory Table.
 - 6. ASTM D4254, Test Methods for Minimum Index Density of Soils and Calculation of Relative Density.
 - 7. ASTM D6913/D6913M Standard Test Methods for Particle Size Distribution (Gradation) of Soils Using Sieve Analysis

1.3 RELATED SECTIONS

- A. Section 31 25 00 – Erosion, Pollution, and Water Control
- B. Section 01 71 13 – Mobilization and Demobilization
- C. Section 02 40 00 – Demolition
- D. Section 31 35 19 – Bioengineering Treatment

1.4 DEFINITIONS

- A. Controlling Agency: any agency, department, commission, or other party that requires standards to be met for the installation, modification, or documentation of a feature.
- B. Deleterious Material: materials that include, but are not limited to, the following: asphalt, wood, clay brick, clay tile, plastic, gypsum, gypsum plaster, wallboard, roots, and all other organic matter.
- C. Field Set: An element to be constructed with onsite observation from the Engineer to review the final layout, location, configuration, and alignment. The Installation Contractor shall make field adjustments to final configuration following concurrence by the Engineer at no additional cost to the Owner.

1.5 QUALITY ASSURANCE

- A. Materials and methods of construction shall comply with the ASTM: American Society for Testing Materials International standards.
- B. Layout and Grading: After staking out the work, and before beginning final construction, the Contractor shall obtain the Engineer's acceptance for layout and grades:
 - 1. The Contractor shall stake out the limits of pilot channel excavation and obtain acceptance from the Engineer prior to beginning excavation operations.
- C. Grade Control: Establish and maintain required lines and elevations. Review grades and lines the Engineer prior to starting work and as work progresses.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Bedrock – shall include any natural compound, natural mixture and chemical element required to be excavated that, in the opinion of the Engineer, can be removed from its existing position and state only by blasting, drilling and blasting, wedging, drilling and

wedging, wedging and breaking with power hand tools, or by extending the use of an approved excavating machine beyond normal and design wear and tear. No boulder, ledge, slab or other single piece of excavated material less than two cubic yards in total volume shall be considered bedrock unless, in the opinion of the Engineer, it must be removed from its existing position by one of the methods mentioned above.

B. All other excavation

1. All other excavation materials shall be unclassified, and may be highly saturated and muck soils. Soft or saturated soils to be reused or spoiled shall be stockpiled on site for drying in such a manner to minimize drying time.
2. The Contractor shall implement erosion control measures, in accordance with the Construction Operations Plan and the SWPPP, to prevent fugitive emissions from stockpiles. See Section 01 71 13 – Mobilization and Demobilization.

PART 3 EXECUTION

3.1 PROTECTION AND SITE PREPARATION

- A. Perform all Earthwork in strict compliance with the Construction Operations Plan. See Section 01 71 13 – Mobilization and Demobilization and Section 31 25 00 – Erosion, Pollution, and Water Control.
- B. Excavation performed above the waterline shall proceed such that excavation spoils are carried away from the water, or otherwise collected and contained before being allowed to contact surface waters.
- C. Protect existing surface and subsurface features on site and adjacent to the site as follows:
 1. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing items indicated to remain in place.
 2. Protect and maintain bench marks, monuments or other established reference points and property corners. If disturbed or destroyed, replace at Contractor's expense to full satisfaction of the Engineer and controlling agency.
 3. Verify location of utilities. Omission or inclusion of utility items does not constitute non-existence or definite location. Secure and examine local utility records for location data and call Dig Safe at 1-888-DIG-SAFE (1-888-344-7233).
 - a) Take necessary precautions to protect existing utilities from damage due to any construction activity.

- b) Repair damages to utility items at Contractor's expense.
- c) In case of damage, notify Engineer at once so protective measures may be taken.
- 4. Maintain free of damage: existing sidewalks, structures, and pavement, not indicated to be removed. Any item known or unknown or not properly located that is inadvertently damaged shall be repaired to original condition. All repairs to be made and paid for by Contractor at no additional cost to the Owner.
- 5. Provide full access to public and private premises, fire hydrants, street crossings, sidewalks and other points as designated by Engineer to prevent serious interruption of travel.
- 6. Maintain stockpiles and excavations in such a manner to prevent inconvenience or damage to structures on-site or on adjoining property.
- 7. Avoid surcharge or excavation procedures which can result in heaving, caving, or slides.
- D. Salvageable Items: Carefully remove items to be salvaged, and maintain unless otherwise directed.
- E. Dispose of waste materials to be removed, in accordance with all applicable laws, regulations, and permits, off-site. Burning, as a means of waste disposal, is not permitted.

3.2 SITE EXCAVATION, GRADING, AND INSTALLATION OF FILLS

- A. The work includes all operations in connection with excavation, construction of fills and embankments, rough grading, and disposal of excess materials required to attain the finish lines and grades as shown on the Drawings.
- B. Excavation and Grading: Perform as required in the Drawings.
 - 1. Ledge Modification shall be carried out with on-site observation by the Engineer.
 - 2. Drawings may indicate existing grade, subgrade, and finished grade required for construction of project. Stake all units, structures, piping, roads, parking areas, and walks and establish their elevations. Perform other layout work required. Replace property corner markers to original location if disturbed or destroyed.
 - 3. Protection of finish grade: During construction, shape and drain embankment and excavations. Protect graded areas against action of

- elements prior to acceptance of work. Reestablish grade where settlement or erosion occurs.
4. Excavations performed shall be contained with sedimentation and erosion controls in accordance with all applicable laws and regulations.
 5. Excavate to elevations and dimensions indicated or specified. Do not carry the channel excavation deeper than the typical subgrade elevation shown on the Drawings. Excavation carried below subgrade shall be replaced with appropriate fill material as determined by the Engineer. The Contractor shall bear all costs for correcting over-excavated areas.
- C. Varying soil moisture contents will be encountered during the excavation. The Contractor shall be equipped to handle excavation with moisture content ranging from dry to very wet during excavation, handling, loading, transport, and disposal. See Section 31 25 00 – Erosion, Pollution, and Water Control for limitations on spillage over the access route in the Project site and along haul routes on public roads.
1. The Contractor shall be responsible for managing, separating, and sorting salvaged material on site and for the transport and placement of salvaged material to be incorporated into the Work.
 2. Removal of obstructions and undesirable materials in excavation includes, but is not necessarily limited to, removal of old foundations, existing construction, logs, riprap, and any other materials which may be concealed beneath the waterline or present grade, as required to perform the Work as indicated on the Drawings. If undesirable material and obstructions are encountered during excavation, remove material and replace with appropriate fill material.
 3. Excavated materials not earmarked for salvage, stockpile, and reuse as fill, or that remain after all fills are complete, shall be disposed of by the Contractor offsite in accordance with all applicable laws and regulations.
 4. Do not carry excavations beyond the limits shown on the Drawings. No extra compensation will be made to Contractor for excavation beyond the grades shown on the drawings without prior approval by the Engineer.
 5. Protection of structures: Prevent new and existing structures to remain from becoming damaged due to construction operations.
 6. Shoring: Shore, sheet pile, slope, or brace excavations as required to prevent them from collapsing. Remove shoring as backfilling progresses but only when banks are stable and safe from caving or collapse.

7. Drainage: Control grading so that ground is pitched to prevent water from running into areas beyond the limits of work. Provide pumping required for keeping excavated spaces clear of water during construction as required to facilitate excavation progress. Discharge of pumped water shall be in strict compliance with the Construction Operations Plan. Refer to Sections 01 71 13 – Mobilization and Demobilization and Section 31 25 00 – Erosion, Pollution, and Water Control.
8. Compact as required to obtain specified density listed below. Control moisture for each layer necessary to meet compaction requirements.
9. Install Surface Fabric Treatment as described in Section 31 35 19 – Bioengineering Treatment.

3.3 EARTHWORK TOLERANCES

A. Slope Grading

1. When completed, the average plane of the slopes shall conform to the slopes indicated on the Drawings, and no point on the completed slopes shall vary from the designated plane by more than 0.5 feet measured at right angles to the slope.

B. Channel Grading

1. When completed, channel grades shall conform to the grades and notes indicated on the Drawings. The grading tolerance is +/- 0.3 feet in all areas unless otherwise described.

3.4 COMPACTION DENSITY REQUIREMENTS

- A. Obtain approval from Engineer with regard to suitability of soils and acceptable subgrade prior to subsequent operations.
- B. Provide dewatering system necessary to successfully complete compaction and construction requirements.
- C. Remove frozen, loose, wet, or soft material and replace with suitable material as accepted by Engineer.
- D. Stabilize subgrade with well graded granular materials as necessary to achieve satisfactory placement and consolidation of design fill.
- E. Compact installed materials to the following densities:

MATERIAL

=====

Valley Slopes:

COMPACTION DENSITY

=====

85 percent, ASTM D698

3.5 FIELD QUALITY CONTROL

- A. The Contractor shall verify that all design grades have been achieved per the Drawings. The Owner's Representative shall review finished areas of grading and check for conformance with the Drawings.
- B. Testing Agency: The Contractor will engage a qualified independent compaction density testing agency to perform field quality-control testing.
- C. The extent of compaction density testing will be as necessary to demonstrate compliance with Specifications.
- D. Should any compaction density test or subgrade inspection fail to meet Specification requirements, the Contractor shall perform corrective work as necessary.
- E. The Contractor shall pay for all costs associated with corrective work and retesting resulting from failure to pass compaction density tests.

END OF SECTION

SECTION 31 25 00
EROSION, POLLUTION, AND WATER CONTROL

PART 1 GENERAL

1.1 SUMMARY

A. Section Addresses:

1. Minimizing the pollution of air, water, or land; controlling noise; disposing of solid waste materials; and protecting deposits of historical or archaeological interest.
2. Implementing standard measures to protect the environment, and conducting work in accordance with all local, state, and federal regulations and permits.
3. Providing construction operations that avoid or minimize damage to adjacent or resident natural resources, avoid air and noise pollution, and otherwise comply with the environmental permits (Section 00 31 46 Permits and Appendix A Permits).
4. Dewatering, stream diversion, or other practices for control of water, and other best management practices such as silt fence, turbidity curtains, oil absorbing booms, bulk bags and other erosion control measures for erosion and pollution control necessary for work on the project.

1.2 QUALITY ASSURANCE

A. Referenced Standards

1. MaineDOT manual on Best Management Practices for Erosion and Sedimentation Control (2008),
<http://www.maine.gov/mdot/env/docs/bmp/BMP2008full.pdf>.
2. MaineDEP manual: Maine Erosion and Sediment Control Practices Field Guide for Contractors (2014),
https://www.maine.gov/dep/land/erosion/escbmps/esc_bmp_field.pdf

1.3 SUBMITTALS

- A. Prepare all submittals in accordance with the procedures identified in Section 01 35 13 – Special Conditions
- B. Control of Water Plan
- C. Spill Prevention Plan

- D. Storm Water Pollution Prevention Plan (SWPPP).
- E. Construction Operations Plan. See Section 01 71 13 - Mobilization and Demobilization.

1.4 RELATED SECTIONS

- A. Section 00 31 46 – Permits
- B. Section 01 35 13 – Special Conditions
- C. Section 01 71 13 – Mobilization and Demobilization
- D. Section 31 23 00 – Earthwork
- E. Section 32 90 00 – Site Plantings
- F. Section 31 35 19 – Bioengineering Treatment
- G. Appendix A - Permits

PART 2 PRODUCTS

2.1 EQUIPMENT

- A. Earthwork shall be completed in conditions free of actively-flowing water. Diversion and bypass of in-stream flows shall be implemented and shall use temporary dams, gravity or pumped diversion pipelines or open conveyances, and upland discharge or other methods.
- B. Dewatering from the work area may include the use of sump pumps, temporary pipelines for water movement, rock or gravel placement, and other methods.

2.2 MATERIALS

- A. Oil absorbent booms
 - 1. Shall be 5-inch diameter, minimum, and constructed of an outer mesh that encapsulates oil absorbent filler material.
 - 2. Shall be capable of absorbing all hydrocarbons including, oil, gasoline, diesel and lubricating oils.
 - 3. Shall not sink when saturated with oil.
- B. Silt Fence
 - 1. A heavy-duty sliced or hand installed woven geotextile silt fence shall be provided and maintained in accordance with manufacturer specifications.

C. Erosion Control Blanket

- If installed in the spring, erosion control blanket shall be North American Green (NAG) style C125BN 100% biodegradable coconut fiber mat or equivalent. This material shall meet the following criteria:

<u>Parameter</u>	<u>Procedure/Test</u>	<u>Criterion</u>
Thickness	ASTM D6525	0.23 inches
Transverse Direction Tensile Strength	ASTM D6818	145.2 lbs/ft
Transverse Direction Elongation	ASTM D6818	12.9%
Machine Direction Tensile Strength	ASTM D6818	206.4 lbs/ft
Machine Direction Elongation	ASTM D6818	15.3%
Mass/Unit Area	ASTM D6475	9.79 oz./sq.yd
Roll Width	Measured	6 feet - 8 inches
Roll Length	Measured	108 feet

If installed in fall or winter, erosion control blanket shall be CS2 straw coir fiber blanket (fall/ winter installation) or equivalent. This material shall meet the following criteria:

<u>Parameter</u>	<u>Procedure/Test</u>	<u>Criterion</u>
Thickness	ASTM D6525	0.4 in
Transverse Direction Tensile Strength	ASTM D6818	100x100 lb/ft
Transverse Direction Elongation	ASTM D6818	30%
Mass/Unit Area	ASTM D6475	8.8 oz./sq.yd
Roll Width	Measured	8 feet
Roll Length	Measured	112.5 feet

- Wattles shall be 9-inch diameter, 7-pound density North American Green style 08CN7 100% biodegradable coconut fiber coir or excelsior wattles (logs) or equivalent. The wattles should meet or exceed the following criteria:

<u>Parameter</u>	<u>Criterion</u>
Density	7 lbs/ft ³
Flow Velocity	5 ft/sec
Diameter	8 inches
Standard Length	10 feet

E. Wood Stakes

- Material requirements for Wood Staples are specified in Section 31 35 19 - Bioengineering Treatment.

F. Wood Staples

1. Material requirements for Wood Staples are specified in Section 31 35 19 - Bioengineering Treatment.

G. Seed

1. Material requirements for Seed are specified in Section 32 90 00 - Site Plantings.

PART 3 EXECUTION

3.1 CONSTRUCTION

- A. No work requiring erosion control shall commence until the SWPPP has been reviewed and accepted by the Engineer.
- B. The Contractor shall furnish, install, maintain, and remove erosion and sediment control devices as shown in the Drawings, or as otherwise required to prevent the discharge of sediment or sediment-laden to protected resources or the active flowing stream.
- C. If any of the installed measures require repair or are rendered ineffective during construction, these measures shall be replaced or repaired by the Contractor and brought back to effective condition at no extra cost.
- D. The Contractor shall adhere to all time-of-year (TOY) restrictions set forth in the project permits. Refer to Section 00 31 46 - Permits and Appendix A Permits for more information on TOY restrictions.

3.2 PROTECTION OF PROPERTY

A. Land Protection:

1. Refer to the Drawings for additional Erosion and Sedimentation Control measures.
2. Except for any work or storage area and access routes specifically assigned for the use of the Contractor, the areas outside the limits of construction shall be preserved in their present condition. Contractor shall confine his activities to areas defined for work as shown on the Drawings.
3. Manage and control all borrow areas, work or storage areas, access routes and embankments to prevent water or sediment from entering nearby water or land adjacent to the work site.
4. Restore all disturbed areas including borrow and haul areas and establish permanent type of locally adaptive vegetative cover.

5. Unless Earthwork is immediately paved or surfaced, protect all side slopes and backslopes immediately upon completion of final grading.
6. Plan and execute Earthwork in a manner to minimize duration of exposure of unprotected soils.
7. Except for areas designated in the Drawings to be cleared, the Contractor shall not deface, injure or destroy trees and vegetation, nor remove, cut, or disturb them without approval of the Owner's Representative. Any damage caused by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the Contractor's expense.
8. Silt fence shall be installed prior to clearing and grubbing to control sediment from leaving the project limits. The Contractor may submit alternate methods of establishing perimeter sediment control in locations where silt fence installation is deemed impractical or problematic. The Contractor shall not make this substitution without prior approval of the Engineer.
9. The Contractor shall be responsible for the removal of temporary erosion control devices once the project is completed.
10. Disturbed areas, as shown in the Drawings, shall be seeded and mulched according to the planting plan as soon as practical after completion of grading operations, but within the period specified for germination of seed.

B. Project Access, Staging and Storage Areas

1. Access corridor and potential staging and storage areas are shown on the Drawings.
2. The Contractor shall be responsible for any repairs, replacement or payment required to return any vegetation, structures, grading or other facilities disturbed in the course of this project by the Contractor, his employees or subcontractors, to the same condition as existed before the project was started. Such repairs, replacement or payment shall be at the Contractor's expense.

C. Haul Routes

1. The Contractor is required to determine and observe any restrictions placed on travel over public or private roads.
2. The Contractor shall be responsible for any repairs, replacement or payment required to return public or private roads damaged in the course

of this project by the Contractor, his employees or subcontractors, to the same condition as existed before the project was started. Such repairs, replacement or payment shall be at the Contractor's expense.

3. The Contractor shall be responsible for limiting spillage of spoils and other impacts from passage of haul vehicles and other operations to comply with road use requirements and to ensure a safe operating environment.

3.3 CONTROL OF NOISE

- A. In areas where hydraulic hammering is required, every reasonable measure shall be taken to ensure that the hammering does not occur in the active stream and in a location that is not hydrologically connected to the active stream, to prevent migration of vibration and sound effects through the water to areas where fish may be present.
- B. If it is deemed not possible to efficiently drain an area where hydraulic hammering is required, coffer dams would be used to attenuate transfer of vibrations and sound through the water.

3.4 FLOW MANAGEMENT

- A. Earthwork shall be completed in conditions free of actively-flowing water.
- B. The Contractor shall perform dewatering in excavations and other work locations to facilitate completion of the work.
- C. Water control shall follow:
 1. these specifications,
 2. all applicable regulations,
 3. all permit conditions, and
 4. all guidelines set forth in the Maine PDES General Permit for Stormwater Discharges from Construction Activities.
- D. Contractor staff responsible for Flow Management, Erosion and Sediment Control shall be identified at the pre-construction conference. 24-hour emergency contact information for this staff shall be provided to the Owner. Refer to 01 35 13 Special Conditions.
- E. The Contractor shall provide all equipment and materials necessary for water control. The Contractor shall have on hand, at all times, sufficient pumping and other equipment and machinery in good working condition and shall have available, at all times, competent workers for the operation of the pumping

equipment. Adequate standby equipment shall be kept available to ensure efficient operation and maintenance of diversions during power failure.

- F. The Contractor shall provide all equipment and personnel to implement the Control of Water Plan. Refer to 01 71 13 Mobilization and Demobilization.
- G. The Contractor shall provide all equipment, documentation (including the Stormwater Pollution Prevention Plans (SWPPP)), and personnel to maintain compliance with the MPDES Construction General Permit. Refer to 01 71 13 Mobilization and Demobilization.
- H. The Contractor is advised that the project area may be subject to groundwater recharge resulting in saturated soil conditions.
- I. Fish rescue: Fish shall be rescued from residual pools by the Contractor following any diversion of streamflow that will dewater the main channel. Fish must be collected via seining, nets or hand capture and removed to the main channel downstream. The Contractor shall notify the Owner and Engineer one week prior to diversion of streamflow to allow for coordination of fish rescue.
- J. Pump inlets shall be screened to prevent fish from entering the pump system.
- K. Contractor shall provide drainage for the site grading at all times. Divert surface runoff from excavations and trenches.
- L. Contractor shall maintain standby diversion and dewatering equipment on the job site.
- M. Discharge of a temporary bypass system must be accomplished in a way that does not cause erosion or turbidity downstream of the project site.
- N. Control of surface runoff shall include operations adequate to bypass, divert, or remove all flowing water.
 - 1. Utilize methods necessary to effectively prevent erosion and sedimentation and include the following:
 - a) Retardation: Mechanically retard rate of runoff by construction of diversion ditches, terraces, and berms. Divert runoff to protect drainage courses.
 - b) Protect side and backslopes as soon as rough grading is complete by accelerated growth of permanent vegetation, temporary vegetation, mulching, or netting.
 - c) Remove temporary protection prior to final grading operations.

3.5 EROSION AND POLLUTION CONTROL

- A. Erosion Control measures shall be in place prior to any ground disturbing activity on the site.
- B. The Contractor shall perform erosion control for the duration of the Contract. The Contractor may use the measures specified and shown in the Drawings, or alternative measures of the Contractor's own design to ensure satisfactory performance and that the erosion control requirements of all applicable permits are met.
- C. Wattles shall be placed to control rill erosion.
- D. Fully biodegradable erosion control blanket shall be secured on slopes steeper than 3:1, not including streambanks which are covered under other provisions.
- E. Dust Control:
 - 1. No construction activity shall take place without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne so that it remains visible beyond the limits of construction. Reasonable measures may include paving, frequent road cleaning, planting vegetative groundcover and the application of water.
 - 2. Utilize methods and practices of construction to eliminate dust in full observance of agency regulations.
 - 3. The Owner's Representative will determine the effectiveness of the dust control program and may request the Contractor to provide additional measures, at no additional cost to the Owner.
- F. In consultation with the Owner and private property owners, identify and stake the limits of work.
- G. After the limits of work have been identified and staked, install Silt Fence as shown in the Drawings, or as otherwise required to ensure satisfactory completion of the work while preventing discharge of sediment or sediment-laden water to protected resources or the active flowing stream. Silt Fence shall be installed prior to clearing and grubbing to control sediment from leaving the project limits. The Contractor may submit alternate methods of establishing perimeter sediment control in locations where silt fence installation is deemed impractical or problematic. The Contractor shall not make this substitution without prior approval of the Owner's Representative.
- H. Silt Fence shall be installed as shown in the Drawings. Silt Fence shall be installed prior to clearing and grubbing to control sediment from leaving the project limits. The Contractor may submit alternate methods of establishing

perimeter sediment control in locations where silt fence installation is deemed impractical or problematic. The Contractor shall not make this substitution without prior approval of the Engineer.

I. Solid Waste Disposal:

1. Collect solid waste on a daily basis.
2. Provide disposal of solid waste to an approved solid waste disposal site.

J. Control of Chemical Waste:

1. Store and dispose of chemical wastes in accordance with all applicable regulations.
2. Take special measures to prevent chemicals, fuels, oils, greases, herbicides, and insecticides from entering drainage ways.
3. Do not allow water used in onsite material processing, concrete curing, cleanup, and other waste waters to enter drainage way(s) or stream(s).

K. Burning:

1. Do not burn material on site.

3.6 MAINTENANCE

- A. Erosion control features shall be maintained by the Contractor for the duration of the project.

3.7 REMOVAL OF FACILITIES AND SUPPLIES

- A. Following the conclusion of project construction and upon approval of the Owner's Representative, the flow management and erosion control facilities and materials shall be removed, and the areas impacted by these operations shall be restored to their original condition. Materials used in flow diversion and erosion control activity shall become property of the Contractor and removed from the site at the Contractor's sole expense.
- B. Completion of Work:
1. Upon completion of work, leave area in a clean, natural-looking condition.
 2. Ensure all indications of temporary construction and activities incidental to construction of required permanent work are removed upon completion of work.

3. Grade, fill and seal all disturbed area. Disturbed areas, as shown in the Drawings, shall be seeded and mulched according to Section 32 90 00 Site Plantings.
4. Upon completion of work, perform project clean-up activities. Remove all materials and dispose of off-site in accordance with applicable regulations. Engineer shall review project clean-up. Project clean-up is not considered complete until the Engineer accepts the work.

END OF SECTION

SECTION 31 35 19

BIOENGINEERING TREATMENT

PART 1 GENERAL

1.1 SUMMARY

- A. Provide all labor, materials, equipment and supervision necessary for work shown on the Drawings and the Specifications. The work of this Section includes, but is not limited to, the following items:
 - 1. Fabric Slope Protection

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM D 6525 - Test for Measuring Nominal Thickness of Permanent Rolled Erosion Control Products
 - 2. ASTM D 1117 - Standard Guide for Evaluating Nonwoven Fabrics
 - 3. ASTM D 6475 - Test for Measuring Mass Per Unit Area of Erosion Control Blankets
 - 4. ASTM D 1388 - Test for Stiffness of Fabrics
 - 5. ASTM D 6818 - Test for Ultimate Tensile Properties of Turf Reinforcement Mats
 - 6. ASTM D 1777 - Test for Thickness of Textile Materials
 - 7. ASTM D 4595 - Test for Tensile Properties of Geotextiles by the Wide-Width Strip Method
 - 8. ASTM D 3776 - Test for Mass Per Unit Area (Weight) of Fabric
- B. Erosion Control Technology Council (ECTC)
 - 1. Standard Specification for Rolled Erosion Control Products

1.3 SUBMITTALS

- A. Prior to ordering, provide Certificates of Compliance for all materials required for fabrication and installation, certifying that each material complies with, or exceeds, specific requirements. This includes, but is not limited to:
 - 1. Non-woven Coir Fabric

2. Woven Coir Fabric
3. Wood Staples
4. Wood Stakes

1.4 RELATED SECTIONS

- A. 31 23 00 - Earthwork
- B. 32 90 00 - Site Plantings

PART 2 PRODUCTS

2.1 WOVEN AND NON-WOVEN COIR FABRIC

- A. The inner (non-woven) layer of coir fabric used in Surface Fabric Treatment shall be North American Green (NAG) style C125BN 100% biodegradable coconut fiber mat or equal as reviewed and accepted by the Engineer. The fabric shall be delivered in roll widths as specified below. The fabric shall meet the following criteria:

<u>Parameter</u>	<u>Procedure/Test</u>	<u>Criterion</u>
Thickness	ASTM D6525	0.23 inches
Transverse Direction Tensile Strength	ASTM D6818	145.2 pounds per foot
Transverse Direction Elongation	ASTM D6818	12.9%
Machine Direction Tensile Strength	ASTM D6818	206.4 pounds per foot
Machine Direction Elongation	ASTM D6818	15.3%
Mass/Unit Area	ASTM D6475	9.79 ounces per square yard
Roll Width	Measured	6 feet - 8 inches
Roll Length	Measured	108 feet

- B. The outer (woven) layer used in Surface Fabric Treatment consists of woven coir fabric that shall be a high strength 700 Weight (100% coconut fiber), continuously woven mat (i.e., without seams) with the following minimum average roll properties:

<u>Parameter</u>	<u>Procedure/Test</u>	<u>Criterion</u>
Thickness	ASTM D5199	0.35 inches
Tensile Strength (wide width, dry)	ASTM D4595	1512 pounds per foot x 1032 pounds per foot
Mass per unit area (min)	ASTM D5261	20.6 ounces per square yard
Open Area	Measured	50%, maximum
Roll Width	Measured	13.1 feet
Roll Length	Measured	165 feet

- C. The woven coir fabrics shall consist of 100% biodegradable, continuously woven mats, without seams. Nylon, plastic, or other non-biodegradable fiber material in any of the coir fabrics is not acceptable.
- D. Each roll of coir fabric shall be packaged individually in a suitable sheet, wrapper, or container to protect the fabric from damage due to ultraviolet light, moisture, and mud during normal storage and handling.
- E. Each roll of coir fabric shall be identified with a tag or label securely affixed to the outside of the roll on one end. The label shall include the manufacturer or supplier, the style number, and the roll and lot numbers.
- F. Store all coir fabrics elevated off the ground and ensure that they are adequately covered to protect the material from damage. Protect coir fabrics from sharp objects which may damage the fabric. Coir fabrics damaged during transport, storage or placement shall be replaced at the Contractors expense.
- G. The Engineer may randomly select and obtain samples from rolls of coir fabric after arrival on the site and prior to installation to compare to previously submitted samples.

2.2 WOOD STAKES

- A. Wood Stakes shall be used to anchor all coir fabrics. Wood Stakes shall be wooden stakes solid and free of knots or defects. Wood Stakes shall be 18 inches in length. Wood Stakes shall be wedge shaped with a minimum equivalent diameter equal to 1.5 inches at the top and should come to a point at the bottom. Wood Stakes should be constructed by cutting a standard grade nominal 2-inch by 4-inch lumber lengthwise along the diagonal to create wedge shaped stakes, or by some other method resulting in a stake of dimensions accepted by the Engineer.

2.3 WOOD STAPLES

- A. Wood Staples shall be used in a supplemental manner after fabrics have been secured with Wood Stakes in spot areas to eliminate slack in fabric installation, and to ensure the fabrics are securely held in contact with the underlying soil.
- B. Wood Staples shall be 12 inches in length, untreated wooden staples solid and free of knots or defects.
- C. Pre-approved: North American Green EcoSTAKES (12-inch) are pre-approved.

2.4 SEED

- A. For Seed see Section 32 90 00 - Site Plantings.

PART 3 EXECUTION**3.1 COMPACTION AND DENSITY REQUIREMENTS**

- A. Confirm subgrade is in accordance with the requirements of Section 31 23 00 – Earthwork
- B. Provide the dewatering system necessary to successfully complete compaction and construction requirements.
- C. Remove frozen, loose, wet, or soft material and replace with suitable material in conformance with Section 31 23 00 – Earthwork.
- D. Compaction densities shall comply with the following requirements:

<u>MATERIAL</u>	<u>COMPACTION DENSITY</u>
Fabric Slope Protection Treatment Area	85 percent, ASTM D698

- E. The Engineer reserves the right to test compaction as needed for verification

3.2 INSTALLATION

- A. Surface Fabric Treatment
 - 1. Surface fabric shall be installed along disturbed banks and ground as shown on the Drawings.
 - 2. The subgrade for Surface Fabric Treatment shall be graded to a smooth condition free from depressions and protruding rocks, sticks, and other debris which may prevent a smooth application or that may damage the fabric. Care shall be taken to remove all objects that would interfere with application or damage the coir fabrics.

3. Key trench the edge of fabric 1 foot (minimum) at the bottom and top of the bank as shown on the Drawings. Place wooden stakes on 3-foot centers in the key trench, pound flush with trench bottom. The location of the key trenches shall be reviewed by the Engineer in the field at the time of construction.
4. Surface Fabric Treatment shall extend up the bank slope to the elevation as shown on the Drawings.
5. Apply Seed per Section 32 90 00 - Site Plantings to the prepared subgrade prior to placement of coir fabrics.
6. Place wooden staples on 18-inch centers and wooden stakes on 3-foot centers.
7. Place woven coir fabrics, as shown on the Drawings, overlying nonwoven fabric. The coir fabrics shall be placed and anchored as shown on the Drawings using wooden stakes. Wooden stakes shall be placed through both layers of coir fabrics. It is not required to anchor the nonwoven and woven fabrics individually. Wooden stakes shall be placed between the fibers of the woven coir fabric. Cutting of the coir fabrics to facilitate wooden stake placement will not be allowed.
8. Wood Stakes and Wood Staples shall be eased between the fibers of the woven coir fabric. Cutting the woven coir fabric to place the Wood Stakes is not allowed.
9. Damaged coir fabric shall be repaired or replaced. If damaged coir fabric has a tear of 6 inches or smaller, scrap fabric may be placed beneath damaged woven coir fabric such that it extends 24 inches beyond the damaged area in all directions. Stake around the tear with 4 Wood Stakes on 12-inch centers. Coir fabrics with tears greater than 6 inches shall be removed and replaced at the Contractor's expense.
10. Following completion of each Surface Fabric Treatment bank installation, review the installation for areas of loose fabric or locations of voids between fabric and soil. Secure these areas with supplemental Wood Stakes or Wood Staples to ensure that fabrics are tight and in solid contact with the underlying soil. The Engineer will review fabric staking in identified areas of loose fabric or voids. If additional staking/stapling is necessary, the Contractor shall perform the corrective action at no expense to the Owner.
11. Maintenance: Seed placed in Surface Fabric Treatment areas shall be watered by the Contractor in accordance with Section 32 90 00 - Site Plantings.

3.3 FIELD QUALITY CONTROL

- A. The Contractor shall verify that all design grades have been achieved in accordance with the Drawings. The Engineer will review finished areas of grading and check for conformance with the Drawings.
- B. Testing Agency: Owner will engage a qualified independent testing agency to perform field quality-control testing.
- C. Compaction density testing will be as necessary to demonstrate compliance with these Specifications.
- D. Should any compaction density test or subgrade inspection fail to meet Specification requirements, the Contractor shall perform corrective work as necessary at no additional cost to the Owner.
- E. Contractor shall pay for all costs associated with corrective work and retesting resulting from failing compaction density tests.
- F. When completed, the average plane of the slopes shall conform to the slopes indicated on the Drawings, and no point on the completed slopes shall vary from the designated plane by more than 0.5 feet measured at right angles to the slope.

END OF SECTION

SECTION 32 90 00
SITE PLANTINGS**PART 1 GENERAL****1.1 SUMMARY**

- A. Work shall include, but not be limited to acquisition, storage, installation and maintenance of seed, mulch, tree and plant stock.
- B. Work shall include the removal and proper disposal of invasive plants, through manual, mechanical, and/or chemical means, in accordance with these Specifications and as shown on the Drawings or as otherwise accepted by the Engineer and Owner.
- C. Work shall include all equipment, labor, materials, and technical expertise to perform the activities required during the Warranty Period. Refer to Section 3.6 Quality Control and Assurance.

1.2 REFERENCED STANDARDS

- A. Seeding shall be performed in accordance with the provisions of
 - 1. American Water Works Association (AWWA).
 - 2. Standard Methods of the Association of Official Agricultural Chemists.
 - 3. United States Department of Agriculture, (USDA):
 - a) Federal Seed Act.
- B. Tree and Shrub Planting shall be performed in accordance with the provisions of
 - 1. American Standard for Nursery Stock (ASNS).
- C. Invasive Plant Management and herbicide application shall be performed in accordance with laws, regulations, and policies of the Maine Board of Pesticides Control including but not limited to
 - 1. Maine Pesticide Control Act of 1975 (Title 7, Sections 601-625)
 - 2. Maine Board of Pesticides Control Law (Title 22, Section 1471-A to X)

1.3 SUBMITTALS

- A. Materials Certifications for Seed Mixes and Containerized Plants
- B. Planting Operations Plan
 - 1. The Contractor shall submit
 - a) A final plant list for approval. Any adjustments or substitutions in plants species, sizes, container types, or quantities, shall be approved by the Engineer and Owner.
 - b) A time schedule for approval indicating dates for commencement and completion of the tagging of plants in the nurseries, delivery of plants to the site, storage and handling of the planting materials, and the completion of work to indicate the start of the Warranty Period.

- c) Certificate of compliance showing where the plants were grown and listing all transplant, age or size as specified, grade and quantity.
 - d) Signed letter from the grower proving that the plants originated within 100 miles of the project site.
- C. 3-year Plant Maintenance Plan
 - 1. The Contractor shall submit a 3-year Plant Maintenance Plan within one month of notice to proceed to be reviewed and accepted by the Engineer and Owner. This Maintenance Plan will address the maintenance of the installed vegetation to achieve the minimum warranty requirements outlined in Section 3.6.B (Warranty). and Section 3.6.C (3-Year Plant Maintenance Plan). of this Specification. The Maintenance Plan shall consider the provision of a prior approved water source, materials to be used for irrigation, methods for protection against animal browse, and a schedule for site maintenance inspections and activities.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Seed
 - 1. Seed mix for the Upland Zone shall be New England Wetland Plants Conservation Mix or equivalent and cover crop. Application rate is 70 PLS lbs./acre.
 - 2. Seed mix for Riparian Zone shall be New England Wetland Plants New England Wetland Mix or equivalent and cover crop. Application rate is 70 PLS lbs./acre.
 - 3. Cover crop shall consist of oats or winter wheat at a rate of 20 PLS lbs. /acre in addition to the native seed mix.
 - 4. The delivered seed mix shall be healthy and vigorous and free of noxious weed seeds. Any adjustments or substitutions in seed species or composition shall be reviewed by the Engineer. Seeds that have become wet, moldy, or otherwise damaged, or do not meet the Specifications shall be legally disposed of offsite and replaced at Contractor's expense.
 - 5. Any seed mixes other than listed above must meet prior written approval by the Engineer or Engineer.
 - 6. All seed mixes must follow these requirements for inspection and acceptance. Each bag of seed delivered shall be clearly labeled including the following information.
 - a) The common name genus, species and subspecies (when applicable).
 - b) The amount of Pure Live Seed (PLS) pounds of each species in each seed mix.
 - c) The total delivered weight, in pounds, of each seed mix.
 - d) The state and county of origin of each species of seed used in mixes.
 - e) The name and address of the seed supplier.

B. Mulch

1. Mulch shall be seedless and weed-free straw mulch. Hay is not acceptable. The straw shall be accompanied by the certification, labels, and/or marking twine at the time of delivery to the project site. Straw delivered to the project without such information may be rejected at the Engineer's discretion and removed from the project site by the Contractor at no cost to the Owner.

C. Plant Materials

2. Imported Plant Materials (Furnish and Install)

- a) All plants shall be species native to Androscoggin County, Maine and nursery grown in accordance with good horticultural practices. Plant materials shall be healthy, vigorous, well-rooted, well branched, densely foliated when in leaf, free of disease and insects (eggs or larvae) and established in the container in which they are growing. They shall have tops of good quality and be in a healthy growing condition.
- b) Plant materials must originate no more than 100 miles from the project site, unless approved by the Engineer and Owner. Proof of this local supply shall be submitted to the Engineer as a signed letter from the grower.
- c) Any adjustments or substitutions in plants species, sizes, container types, or quantities, shall be approved by the Engineer and Owner.
- d) Immediately upon delivery and until installation, plant material shall be shaded and watered to ensure that the plants remain alive and healthy. The Contractor shall store plants in a shaded on-site location and kept moist throughout the entire storage and installation period. A thorough watering is required every 24 hours. Plants should not be stored on-site for more than 2 weeks.
- e) All plants shall be inspected by the Engineer prior to installation.

3. Containerized Plants (Furnish and Install)

- a) Containerized plants shall be used in areas designated for revegetation as shown on the Drawings. Containerized plants shall be supplied by the Contractor and shall include shrubs and trees.
- b) Containerized plants shall be well established in the container with a root system sufficiently developed to retain their shape and hold together when removed from the container. Plants shall not be pot-bound, nor have kinked, circling or bent roots.
- c) Containers shall be sufficiently rigid to hold the root mass during propagation and protect it during shipping.
- d) Distribution will be clumped and randomized and approved by the Engineer prior to installation.
- e) Containerized plants shall be as listed in the table below:

<i>Trees</i>					
<i>Scientific Name</i>	Common Name	Size	Location	Spacing	Quantity
<i>Acer rubrum</i>	Red Maple	1 gallon	Riparian	60 feet	20
<i>Betula populifolia</i>	Grey Birch	1 gallon	Riparian	60 feet	20
<i>Ulmus americana</i>	American Elm	1 gallon	Riparian	60 feet	20
<i>Pinus strobus</i>	White Pine	1 gallon	Upland	80 feet	20
<i>Quercus rubra</i>	Red Oak	1 gallon	Upland	80 feet	20
<i>Fagus grandifolia</i>	American Beech	1 gallon	Upland	80 feet	20
<i>Ulmus americana</i>	American Elm	1 gallon	Upland	80 feet	20
TOTAL					140

<i>Shrubs</i>				
<i>Scientific Name</i>	Common Name	Size	Spacing	Quantity
<i>Alnus incana</i>	Speckled Alder	1 gallon	60 feet	45
<i>Salix discolor</i>	Pussy Willow	1 gallon	60 feet	45
<i>Cornus sericea</i>	Red Osier Dogwood	1 gallon	60 feet	50
				140

1. Live Stakes
 - a) Live stakes shall be used in areas designated for revegetation as shown on the Drawings. Live stakes shall be supplied by the Contractor and shall include shrub species.
 - b) Live Stakes consist of cuttings from live stems of shrubs or trees that are provided in an un-rooted condition and have the ability to establish roots and shoots if planted under proper conditions.
 - c) Live stakes shall be taken from healthy, dormant plants within 100 miles of the project site.
 - d) The materials shall be collected between November 15 and March 1 or and no more than 14 days before installation. The Contractor shall provide documentation from supplier that the materials were harvested

- no more than 14 days prior to planting. Any deviation from these sourcing requirements requires the approval of the Engineer and Owner.
- e) Live stakes shall remain continuously wet from harvest to placement, stored in water and shade with approximately 80% of length from distal end submerged. Water should be changed every 1 to 2 days if cuttings are kept in a container.
 - f) The basal end (bottom) of the materials shall be indicated by a clean, slanted cut. All lateral stems shall be removed at the juncture with the main stem. Tops of the materials (distal ends) shall be indicated by a cut perpendicular to the stem.
 - g) The diameter of Live Stakes shall be 0.5 to 1.0 inches at their midpoint and shall be of sufficient length to extend from the ground surface at the placement location to the level of perennial groundwater of baseflow elevation.
 - h) Distribution will be in staggered rows and three feet on center spacing and approved by the Engineer prior to installation.
 - i) Live stakes shall be as listed in the table below:

<u>LIVE STAKES LIST</u>			
<u>Riparian Revegetation Zone</u>			
<i>Live Stakes</i>			
Latin Name	Common Name	Quantity	Plant Size (diameter)
<i>Alnus incana</i>	Speckled Alder	50	0.5 to 1.0 inches
<i>Salix discolor</i>	Pussy Willow	50	0.5 to 1.0 inches
<i>Cornus sericea</i>	Red Osier Dogwood	50	0.5 to 1.0 inches
<i>Sambucus canadensis</i>	Elderberry	50	0.5 to 1.0 inches
TOTAL		200	

2. Herbicide

- a) Broad-spectrum, non-selective herbicide shall be used to eliminate undesirable woody and herbaceous vegetation in wetland areas. Herbicide shall be approved for use in aquatic areas. Herbicide shall be reviewed and approved by Engineer and Owner prior to use.

PART 3 EXECUTION

3.1 SEED

- A. Apply Seed at the rate provided in these Specifications
- B. Seeding (All Disturbed Areas):

1. Dry seed shall be broadcast for all areas. Seed may be broadcast mechanically or by hand. Seed application method must be pre-approved by the Engineer. Hydroseeding is preferred for areas with slopes steeper than 3:1.
 2. Care of Seeded Areas. All seeded areas shall be protected and maintained throughout the construction of the project and until the work is accepted. No construction traffic will be allowed over a seeded or planted area once the seed and erosion control measures have been completed. Foot traffic shall be minimized; workers shall travel along completed banks only in designated areas. Any damage to seeded areas caused by construction traffic or construction activities shall be repaired and re-seeded at no cost to the Owner.
 3. The seed shall be broadcast under erosion control measures.
 4. Seed shall not be installed when the ground is snow covered.
- C. Re-Seeding:
1. Dry seed shall be broadcast on re-seeding areas in densities specified above for disturbed areas.

3.2 MULCHING

- A. Straw mulch shall be applied at 2 tons (4000lb) per acre; no mulch shall be applied on the Surface Fabric.
- B. Disturbed areas, as shown in the Drawings, shall be seeded and mulched as soon as practical after completion of grading operations, but within the period specified for germination of seed.
- C. Mulch shall be applied over areas disturbed during construction that will not be covered by fabric treatment, and around tree and shrub installations.
- D. Mulching:
- E. The Mulch shall be placed on the same date the seed is applied to the extent practicable.
- F. Mulch shall be placed over seeded areas not covered by fabric.

3.3 PLANTING

- A. Planting shall occur in areas as shown on the Drawings. Plant locations within the planting zones indicated will be determined in the field in coordination with the Engineer.
- B. Planting shall not be permitted during the following conditions unless otherwise approved:
 1. Temperatures less than 32 degrees Fahrenheit
 2. Temperatures greater than 90 degrees Fahrenheit
 3. Wind velocities greater than 20 mph.
- C. The Engineer may suspend planting work if the Engineer determines that weather conditions could damage plant material even if the material is handled in accordance with this Contract. The Engineer may suspend planting work at any time if the Engineer determines that Contractor is not handling plants or planting in accordance with these

Specifications.

- D. Apply water as needed during and after plant installation to ensure maximum success.
- E. Immediately prior to installation of all woody plants, all soil, erosion control fabric, or other material within one foot of the woody plants shall be thoroughly watered with 0.15 gallon per square foot.
- F. Containerized plants:
 - 1. Planting hole size: Pits shall be 3 times the width of the rootball or plant container. Depth of the pits shall correspond to the height of the rootball, measured from the bottom to the lower extent of the root flare, ensuring that the root flare will not be covered. The sides and bottom of pit shall be scarified to prevent glazed soils.
 - 2. Subsurface conditions: The Engineer shall be notified immediately of all subsurface drainage or soil conditions which the Contractor shall consider detrimental to growth or survival of plant material. Contractor shall state condition and submit proposal for correction, including the cost of the correction. No work shall be performed on the affected portion until approval of the correction method is obtained from the Owner in writing.
 - 3. Small cuts may be made in the coir fabric to allow for plant installation. Cuts shall be a single slit no longer than 12 inches and parallel to the river bank and shall be sealed with stakes, sewing or other means as approved by the Engineer.
 - 4. Immediately prior to planting containerized plant material, the root-earth mass shall receive three vertical cuts, each spaced equidistant about the perimeter. Each cut, about 1/2-inch deep, shall begin at the top of the root-earth mass and continue to the bottom.
 - 5. Containers shall be separated from the plant immediately prior to planting to prevent desiccation of the roots. All plants shall be set approximately plumb and to a depth sufficient for the top of the root mass to be even with the soil surface. Topsoil shall then be filled in around the root mass to half the depth, tamped to remove all air pockets and thoroughly watered, after which the remainder of the topsoil shall be placed. Earth saucers or water basins shall then be provided and the plant thoroughly watered.
 - 6. Planting locations shall be in accordance with the Drawing. Exact planting locations will be determined by the Engineer in the field.
- G. Live Stakes:
 - 1. Live stakes shall remain continuously wet from harvest to placement, stored in water and shade with approximately 80% of length from distal end submerged. Water should be changed every 1 to 2 days if cuttings are kept in a container.
 - 2. The basal end (bottom) of the materials shall be indicated by a clean, slanted cut. All lateral stems shall be removed at the juncture with the main stem. Tops of the materials (distal ends) shall be indicated by a cut perpendicular to the stem.

3. Live stakes shall be planted with the basal ends placed into the ground and the top ends protruding above ground such that the buds are oriented upward. Live stakes shall be planted perpendicular to the ground surface. Two-thirds to three-quarters of the total cutting length shall be buried. Pilot holes shall be used to install the live stakes. Top ends of live stakes shall not be damaged during installation.
 4. Planting locations shall be in accordance with the Drawing. Live stakes will be concentrated in near-bank regions. Distribution will be in approximately three staggered rows and three feet on center spacing between stakes and approved by the Engineer prior to installation.
- H. Prevention of invasive species infestation: Prior to planting or seeding, all personnel must ensure that equipment, clothing and footwear is clean and free of seeds. Equipment and personnel may be subject to inspection prior to site entry.
- I. Irrigation:
1. Immediately prior to the installation of all containerized plants, apply water to all soil that contacts the plants. Apply water at a rate of 0.15 gallon per square foot.
 2. All plants shall be watered during planting and all plants shall be watered at least twice each week during weeks where the average daily temperature exceeds 55 degrees (F) and when precipitation during the same week has been less than 1 inch, as determined by local National Weather Service data.
 3. Watering shall be sufficient to provide moist soil to a depth of 6 inches, as determined by the Engineer. If soil is sufficiently moist, as determined by the Engineer, the required watering may be reduced.
 4. Trees or shrubs planted after October 15 shall be thoroughly watered at the time of planting, after which, subsequent watering will not be required until April 1 of the following year.
 5. The Contractor shall maintain a watering log for all plants installed on the project, indicating dates of watering and weather events. Log shall be submitted for final payment.
 6. In case of drought, this plan may be altered in coordination with the Engineer.
 7. All plants shall be watered during planting and all plants shall be watered at least twice each week during weeks where the average daily temperature exceeds 55 degrees (F) and when precipitation is less than 1 inch, as determined by local National Weather Service data.

3.4 TREE AND SHRUB PROTECTION

- A. Rodent Protection
1. Rodent Protection shall be 15 inches solid biodegradable rodent guard.
 2. Rodent Protection must be dug into the ground 6 inches to prevent voles burrowing beneath the plastic.

3. Rodent Protection will be installed on all containerized plants.
- B. Other – trees and shrubs shall be protected in a sufficient manner to achieve the minimum guarantee requirements through the Warranty Period as described in Section 3.6 (Quality Control and Assurance).

3.5 INVASIVE PLANT MANAGEMENT

- A. Invasive plant management is the sole responsibility of the Contractor during construction and the Warranty Period. The scope and limits of invasive plant removals within the Upland Invasive Plant Management Zone and Riparian Invasive Plant Management Zone shall be reviewed with the Owner and Engineer prior to controlling the invasive plants.
- B. The Contractor shall control invasive vegetative species as defined by the Advisory List of Invasive Plants – 2019 by the Maine Natural Areas Program within the limits of invasive plant management as shown on the Drawings and/or any additional disturbed areas using integrated pest management principles consisting of mechanical, biological, and chemical controls that shall be outlined in the Invasive Plant Management Plan or as designated by the Engineer and Owner. Controlling invasives consists of killing and removing invasives by chemical, mechanical, and hand methods. Invasive vegetative species shall be removed and/or treated using methods that minimize the potential for mobilization and/or propagation off site.
- C. Chemical Pesticides
 1. Chemical pesticides include, but are not restricted to, any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest, including but not limited to, insecticides, herbicides, fungicides, adjuvants, and additives, including plant regulators, defoliants and desiccants. The Contractor shall apply chemical pesticides in accordance with the label recommendations, local sensitive area ordinances, and the Maine Board of Pesticides Control laws, regulations, and policies.
 2. The herbicide applicator shall be licensed by the Maine Board of Pesticides Control as a Commercial Applicator. All chemical pesticides shall be delivered to the job site in the original containers, or if pre-mixed off-site, a certification of the components and formulation from the supplier is required.
 3. The Contractor shall ensure confinement of the chemicals within the designated areas. The use of spray chemical pesticides shall require the use of anti-drift and activating agents and a spray pattern indicator unless otherwise allowed by the Engineer.
 4. The Contractor shall assume all responsibility for rendering any area unsatisfactory for planting by reason of chemical application. Damage to adjacent areas shall be repaired to the satisfaction of the Engineer or the property owner at no additional cost to the Owner.
 5. Install warning signs to alert public of herbicide use. Include, at a minimum, the following on the sign: chemicals applied, date applied, re-entry date, other information required by the product label, other information required by local regulations. Remove signage once herbicide applied areas are safe to use again.
 6. Herbicide applications shall be performed in accordance with manufacturer's recommendations and shall follow at least a 12-hour dry period with no precipitation or

dew, with temperatures above 50 degrees Fahrenheit and wind less than 3 miles per hour.

D. Disposal

1. Invasive plants removed as part of this work shall be disposed of off-site in accordance with applicable laws and regulations.

3.6 QUALITY CONTROL AND ASSURANCE

A. The Contractor shall provide all equipment, labor, materials, and technical expertise to perform the activities described in the **3-year Plant Maintenance Plan** including, but not limited to, installing, maintaining, and irrigating site plantings and invasive plant management through the completion of the project, demobilization, and during the Warranty Period.

B. Warranty:

2. The Warranty Period shall extend for **three years**. The Warranty Period shall begin immediately following plant and seed installation.
3. The Warranty shall include maintenance of the planting and seeding areas as described in the approved 3-year Plant Maintenance Plan and as described in Section 3.6.B (Warranty). and 3.6.C (3-year Plant Maintenance Plan) of this Specification.

C. 3-year Plant Maintenance Plan:

1. The Contractor shall submit a 3-year Plant Maintenance Plan to be reviewed and accepted by the Engineer and Owner. This Maintenance Plan will address the maintenance of the installed vegetation to achieve the minimum guarantee requirements outlined in Section 3.6.B. and Section 3.6.C. of this Specification. The Maintenance Plan shall consider the provision of a prior approved water source, materials to be used for irrigation, methods for protection against animal browse, and a schedule for site maintenance inspections and activities.
2. Vegetation maintenance in the planted and seeded areas will be the sole responsibility of the Contractor during the Warranty Period and shall be detailed in the 3-year Plant Maintenance Plan.

D. Seeded Areas: Minimum guarantee requirements

1. Seeded areas guarantee: Areas that do not meet seed success criteria for native seed mix establishment **on July 1st after the installation date** shall be re-seeded during the first available seeding period, as determined by the Engineer and Owner. Re-seeding shall be performed at the Contractor's expense, and in conformance with these specifications.
2. Seeding success criteria: The Owner and Contractor will conduct surveys to verify seeding success. An area will be considered satisfactory if it meets the following criteria:
 - a) A minimum of 80 percent intended vegetative cover (noxious weeds and undesirable non-native species will not be considered intended vegetation);
 - b) Not more than 10% of the seeded area with bare spots larger than 1 square foot; and

c) Vegetation in healthy condition.

E. Tree and Shrub Plant Materials: Minimum guarantee requirements

1. Tree and Shrub guarantee: The Contractor shall replace all containerized plants and live stakes judged by the Owner, within 1-, 2- and 3- years of the installation date, to be dead or in less than vigorous health. Plant replacements shall be of the same species, quality and size as originally installed, or with substitutes pre-approved in writing by the Owner. Replanting shall be performed at no cost to Owner.
2. Replanting shall be conducted according to the original planting Specifications.
3. The Owner and Contractor will conduct inspections at 1-, 2- and 3-year dates following installation date and will notify Contractor of plants needing replacement.
4. Replanting must be conducted within 30 days of notification during acceptable planting periods. Deviations from this plan must be pre-approved in writing by the Owner.

END OF SECTION