CITY OF SANDPOINT
Bid No. 20-3257-1
2020 Cured-in-Place Pipe (CIPP) Project

PROJECT MANUAL

Bid Release:	Thursday, August 6, 2020
Bids Due:	**Thursday, August 27, 2020** No Later Than 2:00:00 PM PST

City of Sandpoint
1123 Lake Street
Sandpoint, Idaho 83864

SANDPOINT

PROJECT MANUAL

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PART 1

ADVERTISEMENT FOR BIDS

ADVERTISEMENT FOR BIDS

Sealed bids will be received by the **City Clerk, City of Sandpoint, at City Hall, 1123 Lake Street in Sandpoint, Idaho 83864, until 2:00:00 p.m. local time on Thursday, August 27, 2020** for the Cured-in-Place Pipe (CIPP) Project.

The project can be summarized to rehabilitate approximately 5,000 linear feet of sanitary sewer pipe utilizing the Cured-in-Place (CIPP) method in Sandpoint, Idaho. The work generally includes sanitary sewer pipe rehabilitation using CIPP, including cleaning, CCTV inspection, cutting off protruding taps, reinstating laterals, and related items of work. A Base Bid and Bid Alternative are included in the Bidding Documents.

Proposals will be opened and publicly read at the above hour and date.

Plans, specifications, forms and other information are on file for examination at the following locations:

1. City of Sandpoint website: http://www.sandpointidaho.gov/doing-business/bids-and-rfps
2. Spokane Regional Plan Center, 209 N Havana St. (PO Box 2968) Spokane, WA 99202
3. Inland Northwest AGC, Abadan Online Planroom: http://www.abadanplanroom.com/
4. Builders Exchange of Washington, Inc. On-Line Plan Center: http://bxwa.com/

A Pre-Bid Conference will not be held.

A bid bond in the amount of 5% of the total bid amount is required. A Public Works Contractor License for the State of Idaho is required to bid this work. Disadvantaged Business Enterprises are encouraged to submit bids.

Estimated Cost: **$150,000 - $300,000**.

END OF ADVERTISEMENT

Publish: Bonner County Daily Bee – August 7 & August 14, 2020

PART 2

INSTRUCTIONS TO BIDDERS

ISPWC - BIDDER'S CHECK LIST

The Bidder's Check List is offered to assist the prospective bidder in checking his/her Bid. This checklist does not relieve the bidder from properly completing his/her Bid.

Check off when completed:

1._____ Are all blank spaces filled out on Bid Form?

2._____ Have questions arising from the bidding, contract, specifications or plans been submitted to the proper authority and resolved in the proper manner?

3._____ Are Bid amounts shown correctly as well as extensions and totals? Recheck for errors or omissions.

4._____ Are authorized signatures properly affixed to the Bid form, giving also title, and Idaho Public Works Contractor license number, evidence of authority to sign, etc.?

5. _____Have all plumbing, heating, air conditioning and electrical subcontractors to whom work will be awarded been listed, as well as their Idaho Public Works Contractor license number?

6._____ Have all Addenda been received and acknowledged with the proper signature on the Bid Form?

7._____ In order for a Bid to be considered, the Bid form, Bid Security, naming of subcontractors form, and other required attachments must be placed in a properly addressed sealed envelope and delivered to the specified authority prior to the time designated for the bid opening.

8._____ Has Bid Security been enclosed?

9.____ Has Bidder performed examinations in accordance with the Instructions to Bidders?

10.____ Has Bidder included additional information required in Article 15 of the Instructions to Bidders?

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. *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.

B. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

C. *Bidder*—The individual or entity who submits a Bid directly to Owner.

D. *Bidding Documents*—The Instructions to Bidders and the proposed Contract Documents (including all Addenda).

E. *Project Manual* – The complete set of Bidding Documents submitted by the City for this bid.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office, City of Sandpoint, website at: https://www.sandpointidaho.gov/doing-business/solicitations or at the other locations identified in the Advertisement for Bids.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; Owner assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder's Idaho Public Works Contractor License No. shall be shown on the Bid Form.

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

3.03 Idaho Code 54-1902 requires Bidder and subcontractors to have the appropriate Public Works Contractor's License to submit a Bid for this project.

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 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. carefully study all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in the Supplementary Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in the Supplementary Conditions as containing reliable "technical data";

E. 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;

F. 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;

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

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

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

4.03 The submission of a Bid will constitute an incontrovertible representation by Bidder that 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 Owner written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Owner 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 – PRE-BID CONFERENCE

5.01 No Pre-Bid Conference will be held.

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 Owner in writing. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda. The deadline for bidder questions is **three** days prior to Bid Opening. 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.

7.03 Bidders may **only contact, in writing,** the City of Sandpoint Contract Procurement Officer, Cheryl Hughes, with any questions at chughes@sandpointidaho.gov.

ARTICLE 8 – BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of the total bid price amount by certified check, cashier's check, or a Bid bond (on the form attached) issued by a surety meeting the requirements of the Bidding Documents.

8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

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

ARTICLE 9 – SUBSTITUTE AND "OR-EQUAL" ITEMS

9.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or those substitute or "or-equal" materials and equipment approved by Owner and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function and quality to be met by any proposed substitute or "or-equal" item. No item of material or equipment will be considered by Owner as a substitute or "or-equal" unless written request for approval has been submitted by Bidder and has been received by Owner at least 5 days prior to the date for receipt of Bids. Each such request shall conform to the requirements of the Bidding Documents. The burden of proof of the merit

of the proposed item is upon Bidder. Owner's decision of approval or disapproval of a proposed item will be final. If Owner approves any proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

ARTICLE 10 – SUBCONTRACTORS, SUPPLIERS AND OTHERS

10.01 Per Idaho Code 67-2310, Bidder shall include in his/her Bid the name, or names and address, or addresses, and Idaho Public Works Contractor License numbers of the Subcontractors who shall, in the event the Bidder secures the Contract, subcontract the plumbing, heating and air-conditioning work, and electrical work under the general Contract. Failure to name Subcontractors as required by this section shall render any Bid submitted by the Bidder unresponsive and void. Use naming of subcontractors form 00440.

ARTICLE 11 – PREPARATION OF BID

11.01 The Bid Form is included with the Bidding Documents.

11.02 All blanks on the Bid Form shall be completed in ink and the Bid Form signed. 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 listed therein.

11.03 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 address and state of incorporation shall be shown.

11.04 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.

11.05 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.

11.06 A Bid by an individual shall show the Bidder's name and official address.

11.07 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. Include evidence of authority to sign.

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

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

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

11.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in Idaho. Bidder's Idaho Public Works Contractor License Number shall also be shown on the Bid Form.

11.12 Bidder must possess a valid City of Sandpoint Business License prior to award of the Contract.

11.13 There is no "Buy America" requirement for this project.

11.14 There is no Federal prevailing wage requirement for this project.

ARTICLE 12 – BASIS OF BID; COMPARISON OF BIDS

12.01 *Lump Sum*

A. Not Used.

12.02 *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 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.

ARTICLE 13 – SUBMITTAL OF BID

13.01 With each copy of the Bidding Documents, a Bidder is furnished one bound copy of the Bid Form, and the Bid Bond Form. The Bid Form is to be completed and submitted with the Bid security and the following documents:

A. Submit documents as required by the Bid Form.

13.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” A mailed Bid shall be addressed to City Clerk, City of Sandpoint, 1123 Lake Street, Sandpoint, ID 83864. It is the Bidder’s sole responsibility to ensure that its Bid is delivered to the location of the Bid opening at the appointed place and time.

13.03 The Bidding Documents on this project requires the Bidder to submit a bid composed of the following parts: Bid Schedule A – Base Bid and Bid Schedule B – Bid Alternative.

A. The Base Bid includes all items that do not change as to quantity, dimension, or type of construction.

B. The Bid Alternative contain all items from the Base Bid with additional items that do not change as to quantity, dimension, or type of construction.

C. Both the Base Bid and the Bid Alternative are described on the Bid Form and the Bidding Documents.

D. The Bidder shall submit a price on each and every item of work included in the base bid. The Bidder shall also submit prices on each and every item under the Bid Alternative.

E. The Base Bid or the Bid Alternative may be awarded based on the best interest of the City of Sandpoint. The Owner reserves the right to award either the Base Bid, the Bid Alternative, or none at all.

ARTICLE 14 – MODIFICATION AND WITHDRAWAL OF BID

14.01 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.

14.02 Relief from Bids. (a) If an awarding authority for the public entity determines that a Bidder is entitled to relief from a Bid because of mistake, the authority shall prepare a report in writing to document the facts establishing the existence of each element required in Section 54-1904C, Idaho Code. The report shall be available for inspection as a public record and shall be filed with the public entity soliciting bids. (b) A Bidder claiming a mistake satisfying all the conditions of Section 54-1904C, Idaho Code, shall be entitled to relief from the Bid and have any Bid Security returned by the public entity. Bidders not satisfying the conditions found in Section 54-1904C, Idaho Code, shall forfeit any Bid Security. Bidders failing to execute a Contract and not satisfying the conditions of a mistake shall also forfeit any Bid Security.

14.03 Grounds for Relief. The Bidder shall establish to the satisfaction of the public entity that:

a) A clerical or mathematical mistake was made;

b) The Bidder gave the public entity written notice within five (5) calendar days after the opening of the bids of the mistake, specifying in the notice in detail how the mistake occurred; and

c) The mistake was material.

ARTICLE 15 – OPENING OF BIDS

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

Bidders may also participate in the public bid opening remotely. Instructions for remote participation is as follows:

Register in advance for this webinar:
https://us02web.zoom.us/webinar/register/WN_wxcizby5Qr-dSWItODvSyg

After registering, you will receive a confirmation email containing information about joining the webinar.

ARTICLE 16 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

16.01 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 17 – EVALUATION OF BIDS AND AWARD OF CONTRACT

17.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids.

17.02 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.

17.03 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.

17.04 In evaluating Bids, Owner will consider if Bidder holds the requisite Public Works Contractor's License.

17.05 If the Contract is to be awarded, Owner will award the Contract to the qualified Bidder submitting the lowest responsive Bid. The lowest responsive Bid will be determined by the Owner based upon selection of either Base Bid or Bid Alternative that is in the best interest of the City of Sandpoint.

17.06 The anticipated schedule for this project is as follows:

Bids Due – August 27, 2020

Anticipated Notice of Intent to Award – August 27, 2020

Anticipated City Council Approval – September 2, 2020

Anticipated Award Date and Notice to Proceed – September 9, 2020

Substantial Completion – November 25, 2020

Final Completion – December 24, 2020

ARTICLE 18 – CONTRACT SECURITY AND INSURANCE

18.01 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 19 – SIGNING OF AGREEMENT

19.01 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 five days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within five days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder.

ARTICLE 20 – SALES AND USE TAXES

20.01 Refer to the Bidding Documents for tax requirements. 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 State of Idaho which are applicable during the performance of the Work.

ARTICLE 21 – PROTESTS TO OWNER

21.01 Prior to a submission of a protest relating to or arising from the solicitation for Bids, all parties shall use their best efforts to resolve concerns raised by an interested party through open and frank discussions.

21.02 Protests shall be concise and logically presented to facilitate review by the Owner. Failure to substantially comply with any of the requirements of Paragraph 21.03 of this section may be grounds for dismissal of the protest.

21.03 Protests shall include the following information:

A. Name, address and fax and telephone numbers of the protester;
B. Solicitation or contract number;
C. Detailed statement of the legal and factual grounds for the protest, to include a description of resulting prejudice to the protester;
D. Copies of relevant documents;
E. Request for a ruling by the Owner;
F. Statement as to the form of relief requested;
G. All information establishing that the protester is an interested party for the purpose of filing a protest; and
H. All information establishing the timeliness of the protest.

21.04 All protests filed directly with the Owner will be addressed to the manager of Owner or other official designated to receive protests.

21.05 Protests based on alleged apparent improprieties in the Bidding Documents and solicitation procedures or evaluation and award criteria shall be filed at least ten (10) calendar days before the proposal submittal date. Failure to promptly file a protest based on solicitation procedures or evaluation and award criteria shall be deemed a waiver of the right to pursue a protest. In all other cases, protests shall be filed no later than five (5) calendar days after the basis of protest is known or should have been known, whichever is earlier, but no later than ten (10) days after the proposal due date.

21.06 Action upon receipt of protest.

A. Upon receipt of a protest before award, a contract may not be awarded, pending resolution of the protest, unless contract award is justified, in writing, to be in the best interest of the Owner.

B. If award is withheld pending Owner resolution of the protest, the Owner will inform the proposers whose proposals might become eligible for award of the contract. If appropriate, the proposers will be requested, before expiration of the time for acceptance of their proposals, to extend the time for acceptance to avoid the need for resolicitation. In the event of failure to obtain such extension of time, consideration should be given to proceeding with award pursuant to paragraph 21.06.A.

C. Upon receipt of a protest within ten (10) days after contract award, the Owner shall immediately suspend performance, pending resolution of the protest, including any review by an independent higher level official, unless continued performance is justified, in writing, for urgent and compelling reasons or is determined, in writing, to be in the best interest of the Owner.

D. Pursuing an Owner protest does not extend the time of obtaining a judicial stay, injunction or other remedy.

E. The Owner shall make its best efforts to resolve protests within 20 days after the protest is filed. To the extent permitted by law and regulation, the parties may exchange relevant information.

F. Owner protest decisions shall be well-reasoned, and explain the Owner's position. The protest decision shall be provided to the protestor using a method that provides evidence of receipt.

PART 3

BID PACKAGE

BID FORM
City of Sandpoint
2020 CIPP Project

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

City of Sandpoint
1123 Lake Street
Sandpoint, ID 83864

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 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Advertisement, Instructions to Bidders, and Bidding Documents, including without limitation those dealing with the disposition of Bid security. 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.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site 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. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-5.03 as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-5.06 as containing reliable "technical data."

E. Bidder has considered 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 the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

F. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, test, 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 Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder safety precautions and programs incident thereto.

G. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this 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.

H. 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.

I. Bidder has given Owner written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Owner is acceptable to Bidder.

J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

A. 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;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;

2. "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;

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.

ARTICLE 5 – BASIS OF BID

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

BID SCHEDULE A – BASE BID

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
2010.4.1.A.1	Mobilization Per Lump Sum	LS	1	**LUMP SUM**	$ _____
SP-1103.4.1.A.1	Traffic Control	LS	1	**LUMP SUM**	$ _____
SP-509.4.1.A.1	CIPP Rehabilitation – 8"	LF	5,051	$ _____	$ _____
SP-509.4.1.B.1	Cut Off Protruding Laterals	EA	20	$ _____	$ _____
SP-509.4.1.C.1	Lateral Reinstatement	EA	80	$ _____	$ _____
SP-512.4.1.A.1	Pre-Construction Cleaning and TV Inspection of Main Sewer Line	LF	5,051	$ _____	$ _____
SP-512.4.1.A.1	Post-Construction Cleaning And TV Inspection of Main Sewer Line	LF	5,051	$ _____	$ _____
SP-513.4.1.A.1	Small Diameter (≤18-in) Bypass Sewage Pumping	LS	1	**LUMP SUM**	$ _____
				TOTAL OF BID SCHEDULE A	$_____

BID SCHEDULE B – BID ALTERNATIVE

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
2010.4.1.A.1	Mobilization	LS	1	**LUMP SUM**	$ _____
SP-1103.4.1.A.1	Traffic Control	LS	1	**LUMP SUM**	$ _____
SP-509.4.1.A.1	CIPP Rehabilitation – 8"	LF	5,783	$ _____	$ _____
SP-509.4.1.A.1	CIPP Rehabilitation – 10"	LF	368	$ _____	$ _____
SP-509.4.1.B.1	Cut Off Protruding Laterals	EA	22	$ _____	$ _____
SP-509.4.1.C.1	Lateral Reinstatement	EA	106	$ _____	$ _____
SP-512.4.1.A.1	Pre-Construction Cleaning and TV Inspection of Main Sewer Line	LF	6,151	$ _____	$ _____
SP-512.4.1.A.1	Post-Construction Cleaning and TV Inspection of Main Sewer Line	LF	6,151	$ _____	$ _____
SP-513.4.1.A.1	Small Diameter (≤18-in) Bypass Sewage Pumping	LS	1	**LUMP SUM**	$ _____
				TOTAL OF BID SCHEDULE B	$_____

5.01 Bid prices listed shall include all applicable taxes and fees.

5.02 Unit Prices have been computed in accordance with the Contract Documents.

5.03 Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION & EMPLOYMENT

6.01 Bidder agrees that all items included in the Base Bid or Bid Alternative will be substantially complete by November 25, 2020 and will be completed and ready for final payment in accordance with the General Conditions by December 24, 2020.

6.02 Bidder accepts the provisions of the Contract Documents as to liquidated damages.

6.03 Bidder agrees to comply with Idaho Code 44-1001 through 44-1005, regarding employment of Idaho residents.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security in the form of: cash, a certified check, cashier's check, or a Bid bond (on the form attached) issued by a surety meeting the requirements of the General Conditions.;

B. Bidder shall include in his Bid the name, or names and address, or addresses, and Idaho Public Works Contractor License Numbers of the Subcontractors who shall, in the event the Bidder secures the Contract, subcontract the plumbing, heating and air-conditioning work, and electrical work under the general Contract;

C. State of Idaho Public Works Contractor's License No.: _____ ;

D. *Not Used*

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Bidding Documents.

ARTICLE 9 – BID SUBMITTAL

9.01 This Bid is submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest _____

Date of Qualification to do business in Idaho is ____/____/____.

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____(SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

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

Bidder's Business Address _____

_____

Phone No. _____ Fax No. _____

E-mail _____ _____

SUBMITTED on _____, 20____.

Idaho Public Works Contractor License No. _____.

BID BOND

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

BIDDER *(Name and Address)*:

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

OWNER *(Name and Address)*:
City of Sandpoint
1123 Lake St.
Sandpoint, ID 83864

BID
Bid Due Date:
Description *(Project Name and Include Location)*:
2020 CIPP Project, Sandpoint, Idaho (Bid No. 20-3257-1)

BOND
Bond Number: _____
Date *(Not earlier than Bid due date)*: _____
Penal sum _____ $ _____
(Written in Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER

_____ (Seal)
Bidder's Name and Corporate Seal

By: _____
Signature

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

SURETY

_____ (Seal)
Surety's Name and Corporate Seal

By: _____
Signature (Attach Power of Attorney)

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint ventures, if necessary.

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 shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur 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 shall 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 shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall 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 Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall 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 Registered or Certified Mail, return receipt requested, postage pre-paid, and shall 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 shall 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 shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

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

Naming of Subcontractors Form

Per Idaho Code, 67-2310, Bidder shall include in his or her Bid the names and address, and Idaho Public Works Contractor License Number of the Subcontractors who shall, in the event the Bidder secures the Contract, subcontract the plumbing, heating and air-conditioning work, and electrical work under the general Contract. Failure to name Subcontractors as required shall render any Bid submitted by the Bidder unresponsive and void.

Subcontractor Name and Address	Classification	License Number
_____ _____ _____	Plumbing Contractor	_____
_____ _____ _____	Heating and Air-Conditioning Contractor	_____
_____ _____ _____	Electrical Contractor	_____
_____ _____ _____	_____	_____
_____ _____ _____	_____	_____
_____ _____ _____	_____	_____

PART 4

SAMPLE CONTRACT FORMS

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT

This Agreement is by and between **CITY OF SANDPOINT** ("Owner") and _____("Contractor").

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

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: cured-in-place pipe rehabilitation of approximately 5,000 to 6,200 lineal feet of 8-inch and 10-inch sanitary sewers, including cleaning, CCTV inspection, cutting off protruding taps, and reinstating laterals, and related items of work.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: City of Sandpoint – 2020 Cured-in-Place Pipe (CIPP) Project.

ARTICLE 3—ENGINEER

3.01 The Owner has retained J-U-B ENGINEERING, INC ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

A. For both the Base Bid and the Bid Alternative, the Work must be substantially complete by November 24, 2020, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions by December 24, 2020.

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 Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time.

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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 $850.00 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified 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 $425.00 for each day that expires after such time until the Work is completed and ready for final payment.

4. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive, and will not be imposed concurrently. Pursuant to this provision, Owner has elected to limit all recoverable liquidated damage amounts to a maximum of $850.00 per day.

B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:

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

ARTICLE 6—PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

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

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the **25th** day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

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

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previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.

a. **95** percent of the value of the Work completed (with the balance being retainage).

b. **95** 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 **95** percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions.

6.03 *Final Payment*

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

6.04 *Consent of Surety*

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

6.05 *Interest*

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

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

A. The Contract Documents consist of all of the following:

1. This Agreement.
2. Bonds:
   a. Performance bond (together with power of attorney).
   b. Payment bond (together with power of attorney).
3. Standard General Conditions, EJCDC C-700 (2018 Edition).
4. Supplementary Conditions.
5. Specifications (not attached but incorporated by reference) consisting of the Idaho Standards for Public Works Construction (ISPWC – 2015 Edition), excluding Division 100.
6. Special Provisions.
7. Drawings:
   a. Rehabilitation schedules consisting of 20 sheets.
   b. Vicinity maps consisting of 7 sheets.
9. Addenda
10. Contractor's Bid Form

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11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
    a. Notice to Proceed.
    b. Work Change Directives.
    c. Change Orders.
    d. Field Orders.
    e. Warranty Bond, if any.
12. In the event of inconsistency between the Contract Documents, the Contract Documents shall be interpreted in accordance with the listed priorities set forth in this provision, i.e, requirements of item 1 shall supersede all lower ranked items.

B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 7.

D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 *Contractor's Representations*

A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:

1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and

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observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.

9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and

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

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

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

Owner:

_____
(typed or printed name of organization)

By: _____
(individual's signature)

Date: _____
(date signed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Address for giving notices:

_____

_____

_____

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

_____

_____

_____

Phone: _____

Email: _____

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

Contractor:

_____
(typed or printed name of organization)

By: _____
(individual's signature)

Date: _____
(date signed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

*(If **[Type of Entity]** is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Address for giving notices:

_____

_____

_____

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

_____

_____

_____

Phone: _____

Email: _____

License No.: _____
(where applicable)

State: _____

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PERFORMANCE BOND

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

CONTRACTOR (*Name and Address*):

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

OWNER (*Name and Address*):
City of Sandpoint
1123 Lake St.
Sandpoint, ID 83864

CONTRACT
Effective Date of Agreement:
Amount (Figures):
Description (*Name and Location*): City of Sandpoint, 2020 CIPP Project

BOND
Bond Number:
Date (*Not earlier than Effective Date of Agreement*):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

_____ (Seal)
Contractor's Name and Corporate Seal

By: _____
Signature

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

SURETY

_____ (Seal)
Surety's Name and Corporate Seal

By: _____
Signature (Attach Power of Attorney)

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

1. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 2.1.

2. If there is no Owner Default, Surety's obligation under this Bond shall arise after:

   2.1 Owner has notified Contractor and Surety, at the addresses described in Paragraph 9 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor, and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and

   2.2 Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 2.1; and

   2.3 Owner has agreed to pay the Balance of the Contract Price to:

      1. Surety in accordance with the terms of the Contract; or

      2. Another contractor selected pursuant to Paragraph 3.3 to perform the Contract.

3. When Owner has satisfied the conditions of Paragraph 2, Surety shall promptly, and at Surety's expense, take one of the following actions:

   3.1 Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or

   3.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

   3.3 Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 5 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or

   3.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

      1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or

      2. Deny liability in whole or in part and notify Owner citing reasons therefor.

4. If Surety does not proceed as provided in Paragraph 3 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 3.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

5. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 3.1, 3.2, or 3.3 above, then the responsibilities of Surety to Owner shall not be

greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To the limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

5.1 The responsibilities of Contractor for correction of defective Work and completion of the Contract;

5.2 Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions of or failure to act of Surety under Paragraph 3; and

5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

6. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

7. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located, and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

9. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

10. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

11. Definitions.

11.1 Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.

11.2 Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

11.3 Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

11.4 Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or otherwise comply with the other terms thereof.

FOR INFORMATION ONLY – *(Name, Address and Telephone)* Surety Agency or Broker:

PAYMENT BOND

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

CONTRACTOR (*Name and Address*):

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

OWNER (*Name and Address*):
City of Sandpoint
1123 Lake St.
Sandpoint, ID 83864

CONTRACT
Effective Date of Agreement:
Amount (Figures):
Description *(Name and Location)*: City of Sandpoint, 2020 CIPP Project

BOND
Bond Number:
Date (*Not earlier than Effective Date of Agreement*):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

_____ (Seal)
Contractor's Name and Corporate Seal

By: _____
Signature

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

SURETY

_____(Seal)
Surety's Name and Corporate Seal

By: _____
Signature (Attach Power of Attorney)

_____
Print Name

_____
Title

Attest: _____
Signature

_____
Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.
2. With respect to Owner, this obligation shall be null and void if Contractor:

   Promptly makes payment, directly or indirectly, for all sums due Claimants, and

   Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.
3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.
4. Surety shall have no obligation to Claimants under this Bond until:

   Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

   Claimants who do not have a direct contract with Contractor:

   1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and
   2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and
   3. Not having been paid within the above 30 days, have sent a written notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.
5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.
6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

   Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

   Pay or arrange for payment of any undisputed amounts.
7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.
8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of

the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders, and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, 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 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 shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. Definitions

Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and 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.

Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract, or to perform and complete or otherwise comply with the other terms thereof.

FOR INFORMATION ONLY – *(Name, Address and Telephone)* Surety Agency or Broker:

PART 5

EJCDC C-700 – STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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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

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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

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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.

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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.

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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.

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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.

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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

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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.

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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

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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.

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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

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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.

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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.

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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

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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.

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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

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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;

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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

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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

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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

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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

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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

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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.

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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);

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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

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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.

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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.

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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;

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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

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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.

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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

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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:

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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.

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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

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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

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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

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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

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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.

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g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. The cost of purchasing, renting, or furnishing small tools and hand tools.

3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

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

5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

6. Expenses incurred in preparing and advancing Claims.

7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:

a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.

b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:

1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.

2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.

2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

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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

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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.

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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,

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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,

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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

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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.

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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;

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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

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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

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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.

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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,

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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.

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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,

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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

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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.

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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.

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PART 6

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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

1.01 *Defined Terms*

SC-1.01 Supplement Paragraph 1.01.A.42 as follows:

Substantial Completion is further defined as (i) that degree of completion of the Project’s operating facilities or systems sufficient to provide the Owner the full time, uninterrupted, and continuous beneficial operation of the Work; and (ii) all required functional, performance and acceptance, or startup testing and commissioning has been successfully demonstrated for all components, devices, equipment, and instrumentation and control to the satisfaction of the Engineer in accordance with the requirements of the Specifications; and (iii) the Acceptance Testing period has been successfully completed without significant interruption, as specified; and (iv) all inspections required have been completed and identified defective Work replaced or corrected.

SC-1.01 Add the following paragraphs immediately after Paragraph 1.01.A.50:

51. *Special Provisions* – The part of the Contract that amends or supplements the Specifications.

52. *Request for Information* – A written request for information or clarification, requiring a written response to Owner, Engineer, or Contractor, initiated by Owner, Engineer, or Contractor.

ARTICLE 2—PRELIMINARY MATTERS

2.02 *Copies of Documents*

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

A. Owner shall furnish to Contractor **[1]** printed copies of conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully signed counterpart of the Agreement). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

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2.04 *Preconstruction Conference; Designation of Authorized Representatives*

SC-2.04 Add the following paragraphs immediately after Paragraph 2.04.B

C. Agenda for conference:

1. Submission of execution bonds and insurance certifications.
2. Distribution of Contract Documents.
3. Submission list of Subcontractors, list of products, Schedule of Values, and progress schedule.
4. Designation of personnel representing the parties in Contract.
5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change orders and Contract Close-out procedures.
6. Surveying, layout and scheduling.
7. Construction Traffic Control – Submit Construction Traffic Control Plan(s)

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

SC-3.01 Delete Paragraph 3.01.C in its entirety.

SC-3.01 Add the following paragraphs immediately after Paragraph 3.01.G:

H. The Specifications may vary in form, format and style. Some specification sections are written in varying degrees of streamlined or declarative style and some sections may be relatively narrative by comparison. Omissions of such words and phrases as “the Contractor shall,” “in conformity with,” “as shown,” or “as specified” are intentional in streamlined sections. Omitted words and phrases shall be supplied by inference. Similar types of provisions may appear in various parts of a section or articles within a part depending on the format of a section. The Contractor shall not take advantage of any variation of form, format or style in making claims for extra work.

I. The cross referencing of specification sections under the subparagraph heading “Related Sections include but are not necessarily limited to:” and elsewhere within each specification section is provided as an aid and convenience to the Contractor. The Contractor shall not rely on the cross referencing provided and shall be responsible to coordinate the entire work under the Contract Documents and provide a complete Project whether or not the cross referencing is provided in each section or whether or not the cross referencing is complete.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.05 *Delays in Contractor’s Progress*

SC-4.05 Amend Paragraph 4.05.C by adding the following subparagraphs:

5. Weather-Related Delays

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a. 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.

b. The existence of abnormal weather conditions will not relieve Contractor of the obligation to demonstrate and document that delays caused by abnormal weather are specific to the planned work activities or that such activities thus delayed were on Contractor's then-current Progress Schedule's critical path for the Project.

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

5.02 Use of Site and Other Areas

SC-5-02 Add the following paragraph immediately after Paragraph 5.02.A.1

a. Other than for traffic control and jobsite safety, no signs or advertising of any kind is allowed on the jobsite except as approved in advance by the Owner or as required by the Special Provisions.

5.03 *Subsurface and Physical Conditions*

SC-5.03 Delete Paragraphs 5.03.A in its entirety and insert the following:

A. *Reports and Drawings:* No reports or drawings related to the subsurface and physical conditions are known to Owner.

5.06 *Hazardous Environmental Conditions*

SC-5.06 Delete Paragraphs 5.06.A and 5.06.B in its entirety and insert the following:

A. *Reports and Drawings:* No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.

B. Not used.

SC-5.06 Supplement Paragraph 5.06.C with the following new paragraphs immediately after Paragraph 5.06.C:

1. The Contractor's scope of work shall include implementation of necessary safety, public health and environmental procedures and requirements relating to sanitary sewage encountered during the work.

2. The Contractor's scope of work shall include necessary safety and environmental requirements for handling and disposal of asbestos pipe removed from service or excavated during the course of the work.

ARTICLE 6—BONDS AND INSURANCE

6.02 *Insurance—General Provisions*

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SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

1. Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.D:

1. All certificates of insurance shall name as additionally insured:

   a. Owner: City of Sandpoint

6.03 *Contractor's Insurance*

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

D. *Workers' Compensation and Employer's Liability:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap employer's liability coverage for monopolistic states, and foreign voluntary workers' compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions). All insurance policies shall contain a Waiver of Subrogation coverage or endorsements.

Workers' Compensation and Related Policies	**Policy limits of not less than:**
Workers' Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman's)	Statutory
Foreign voluntary workers' compensation (employer's responsibility coverage), if applicable	Statutory

E. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:

1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
2. damages insured by reasonably available personal injury liability coverage, and
3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.

F. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:

1. Products and completed operations coverage.

   a. Such insurance must be maintained for three years after final payment.

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b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.

2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.

3. Severability of interests and no insured-versus-insured or cross-liability exclusions.

4. Underground, explosion, and collapse coverage.

5. Personal injury coverage.

6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.

7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

8. All policies shall contain a waiver of subrogation coverage or endorsements.

G. *Commercial General Liability—Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:

1. Any modification of the standard definition of "insured contract" (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).

2. Any exclusion for water intrusion or water damage.

3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.

4. Any exclusion of coverage relating to earth subsidence or movement.

5. Any exclusion for the insured's vicarious liability, strict liability, or statutory liability (other than worker's compensation).

6. Any limitation or exclusion based on the nature of Contractor's work.

7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.

H. *Commercial General Liability—Minimum Policy Limits*

Commercial General Liability	Policy limits of not less than:
General Aggregate	$2,000,000.00
Products—Completed Operations Aggregate	$2,000,000.00
Personal and Advertising Injury	$1,000,000.00
Bodily Injury and Property Damage—Each Occurrence	$1,000,000.00

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

Automobile Liability	**Policy limits of not less than:**
Combined Single Limit	
Combined Single Limit (Bodily Injury and Property Damage)	$1,000,000.00

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

Excess or Umbrella Liability	**Policy limits of not less than:**
Each Occurrence	$2,000,000.00
General Aggregate	$2,000,000.00

K. *Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements:* Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein.

L. *Contractor's Pollution Liability Insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance must be maintained for no less than three years after final completion.

Contractor's Pollution Liability	**Policy limits of not less than:**
General Aggregate	$1,000,000.00

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

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Contractor's Professional Liability	Policy limits of not less than:
Each Claim	$500,000.00
Annual Aggregate	$1,000,000.00

6.04 *Builder's Risk and Other Property Insurance*

SC-6.04 Add the following language at the end of Paragraph 6.04.A of the General Conditions:

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.

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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."

SC-6.04 Delete Paragraphs 6.04.B and 6.04.C in their entirety and add the following Paragraphs immediately after Paragraph 6.04.D:

1. All insurance required by the Contract Documents or by law or regulations shall remain in full force and effect on all phases of the Work, whether or not the Work is occupied or utilized by the owner, until all Work included in the agreement has been completed and final payment has been made.

2. Nothing contained in the insurance requirements shall be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his operations under the Contract. Contractor agrees that he alone shall be completely responsible for procuring and maintaining full insurance coverage as provided herein or as may be otherwise required by the Contract Documents. Any approval by Owner or Engineer shall not operate to the contrary.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.02 *Supervision and Superintendence*

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

1. Contractor's Superintendent shall be on site at all times work crews are present.

7.03 *Labor; Working Hours*

SC-7.03 Supplement Paragraph 7.03.C of the General Conditions as follows:

C. Contractor (and Subcontractors) regular working hours for noisy operations shall be limited to the hours of 7:00 a.m. to 5:00 p.m weekdays only unless otherwise specified in the Contract or approved by the Owner. Other construction activities not generating significant noise including the warming up, repair, arrival, departure or running of trucks, earthmoving equipment, construction equipment and any other associated equipment shall be limited to the period between 6:30 a.m. and 7:00 p.m. weekdays only unless otherwise approved by the Owner.

7.09 *Permits*

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

B. Work performed within 5th Avenue shall require an encroachment permit from the Idaho Transportation Department (ITD). Owner shall be responsible for obtaining the permit and all required coordination and application fees.

7.10 *Taxes*

SC-7.10 Add the following paragraph immediately after Paragraph 7.10.A:

B. In the event of the Contractor's default on the payment of taxes, excises, and license fees as set forth in Idaho Code 63-1503, the Owner shall have the authority to withhold from any payment due the Contractor under this contract, the estimated amount of such accrued and accruing taxes, excises, and license fees for the benefit of all taxing authorities to which said Contractor is liable.

7.11 *Laws and Regulations*

SC-7.11 Add the following paragraph immediately after Paragraph 7.11.C:

D. While not intended to be inclusive of all Laws or Regulations for which Contractor may be responsible under paragraph 6.09, the following Laws or Regulations are included as mandated by statute or for the convenience of the Contractor;

1. **Idaho Code Section 63-1501. Definitions.** As used in this act, the following terms shall have the following meanings:

   "Contracting units" shall include the state or any officer or department thereof, the counties or other subdivisions of the state, and all municipal and quasi-municipal corporations therein.

   "Contractor" shall mean any person, firm, co-partnership, association, or corporation, foreign or domestic, entering into a contract for the construction, erection, repair, or improvement of any kind or character of public works in this state.

   "Taxes" shall mean all taxes, assessments, excises, and license fees authorized to be levied, assessed, and collected under the laws of this state, other than taxes on real property.

   "Taxing unit" shall mean the state or any officer or department thereof, the counties or other subdivisions of the state, and all municipal and quasi-municipal corporations therein authorized by law to assess, levy and collect taxes.

2. **Idaho Code Section 63-1502. Conditions precedent to contract for public works.** Before entering into a contract for the construction of any public works in this state, the contracting unit shall require as conditions precedent that the contractor be authorized to do business in this state and that he furnish satisfactory evidence that he has paid or secured to the satisfaction of the respective taxing units all taxes for which he or his property is liable then due or delinquent.

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3. **Idaho Code Section 63-1503. Contractor for public works to pay or secure taxes—Agreement.** Every contract for the construction of public works by a contracting unit of this state shall contain substantially the following provisions:

   The Contractor, in consideration of securing the business of erecting or constructing public works in this state, recognizing that the business in which he is engaged is of a transitory character, and that in the pursuit thereof, his property used therein may be without the state when taxes, excises, or license fees to which he is liable become payable, agrees:

   a. To pay promptly when due all taxes (other than on real property), excises and license fees due to the state, its subdivisions, and municipal and quasi-municipal corporations therein accrued or accruing during the term of this contract, whether or not the same shall be payable at the end of such term;

   b. That if the said taxes, excises, and license fees are not payable at the end of said term, but liability for the payment thereof exists, even though the same constitute liens upon his property, to secure the same to the satisfaction of the respective officers charged with the collection thereof; and

   c. That in the event of his default in the payment or securing of such taxes, excises, and license fees, to consent that the department, officer, board, or taxing unit entering into this contract may withhold from any payment due him hereunder the estimated amount of such accrued and accruing taxes, excises, and license fees for the benefit of all taxing units to which said contractor is liable.

4. **Idaho Code Section 44-1002** requires the following: The Contractor must employ ninety-five percent (95%) bona fide Idaho residents as employees on any job under any such contract except where under such contracts fifty (50) or less persons are employed, the Contractor may employ ten percent (10%) nonresidents, provided, however, in all cases employers must give preference to the employment of bona fide residents in the performance of said work, and no contract shall be let to any person, firm, association, or corporation refusing to execute an agreement with the above mentioned provisions in it; provided, that, in contracts involving the expenditure of federal aid funds this act shall not be enforced in such a manner as to conflict with or be contrary to the federal statutes prescribing a labor preference to honorably discharged soldiers, sailors, and marines, prohibiting as unlawful any other preference or discrimination among citizens of the United States.

5. **Idaho Code Chapter 19 of Title 54** requires proper licensing of Public Works Contractors.

7.16 *Submittals*

SC-7.16 Amend all paragraphs of 7.16 by striking out “review and approval” and replacing with “review for general compliance”.

SC-7.16 Add the following immediately after Paragraph 7.16.B.3:

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4. Transmit each submittal with a letter of transmittal containing all pertinent information required for identification and checking of submittals. The Submittal Transmittal Form will be provided by the Engineer.

    a. Sequentially number transmittals forms. Resubmittals should have the original number with an alphabetic suffix.

    b. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.

    c. Schedule submittals to expedite the Project, and deliver to Engineer at business address. Coordinate and group submission of related items.

    d. Maintain a submittal log for the duration of the project, including status of all submittals at all times. Make log available to Engineer or Owner upon request.

SC-7.16 Add the following immediately after Paragraph 7.16.C.8:

9. Engineer's review of Shop Drawings and Samples, Standard Specifications and descriptive literature submitted by Contractor will be only for general conformance with design concept, except as otherwise provided, and shall not be construed as:

    a. permitting any departure from the Contract Requirements;

    b. relieving Contractor of the responsibility for any error in details dimensions or otherwise that may exist in such submittals;

    c. constituting a blanket approval of dimensions, quantities, or details of the material or equipment shown; or

    d. approving departures from additional details or instructions previously furnished by Engineer. Such check or review shall not relieve Contractor of the full responsibility of meeting all of the requirements of the Contract Documents.

SC-7.18 Delete Paragraph 7.18.A in its entirety and insert the following paragraph in its place:

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 defend, 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.

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ARTICLE 8—OTHER WORK AT THE SITE

No Supplementary Conditions in this Article.

ARTICLE 9—OWNER'S RESPONSIBILITIES

No Supplementary Conditions in this Article.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.03 *Resident Project Representative*

SC-10.03 Delete Paragraphs 10.03 in its entirety.

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

13.03 *Unit Price Work*

SC-13.03 Delete Paragraph 13.03.E.1.a in its entirety and insert the following in its place:

a. the extended price of a particular item of Unit Price Work amounts to 10 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and

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

No Supplementary Conditions in this Article.

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

15.04 *Partial Use or Occupancy*

SC-15.04 Delete Paragraph 15.04.A in its entirety and replace with the following:

A. Prior to Substantial Completion of all the Work, Owner and general public may use or occupy any part of the Work that can be used for its intended purpose without jeopardizing the quality of the Work, invalidating the Contract and without constituting acceptance of any of

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the Work. Contractor shall cooperate, schedule, and coordinate all activities and minimize conflicts with the Owner.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

No suggested Supplementary Conditions in this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

No suggested Supplementary Conditions in this Article.

ARTICLE 18—MISCELLANEOUS

SC-18.07 Delete Paragraph 18.07 in its entirety and insert the following paragraph in its place:

18.07 Controlling Law

This Contract is to be governed by the law of the State of Idaho. The jurisdiction/venue for any action arising out of performance of this Contract, or interpretation of its terms and conditions, shall be in the District Court in the First Judicial District of the State of Idaho, Bonner County. In any action to enforce the terms and conditions of this Contract, the prevailing party may recover its reasonable attorney fees.

Add the following Article 19–Prosecution of the Work, immediately following Article 18—Miscellaneous.

ARTICLE 19—PROSECUTION OF THE WORK

SC-19.01 *General*

A. From the time of commencement of the Work to the time of Final Acceptance the Contractor shall: provide adequate Materials, Equipment, labor, and supervision to perform and complete the Work; perform the Work as vigorously and as continuously as conditions permit, and according to a Project Work schedule that ensures completion within the Contract Time or the adjusted Contract Time; not voluntarily suspend or slow down operations without prior written approval from the Engineer; and not resume suspended Work without the Engineer's written authorization.

SC-19.02 *Cost Reduction Proposals*

A. The Contractor may submit written proposals to the Engineer that modify Plans, Specifications, or other Contract Documents for the sole purpose of reducing the total cost of construction. Unless otherwise agreed to in writing, a proposal that is solely or primarily a proposal to reduce estimated quantities or delete Work, is not eligible for consideration as a cost reduction proposal.

B. Proposal Requirements - The Engineer will not adopt a cost reduction proposal that impairs essential functions or characteristics of the Project, including, but not limited to, service life,

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economy of operation, ease of maintenance, designed appearance, or design and safety standards.

To conserve time and funds, the Contractor may first submit a written request for a feasibility review by the Engineer. The request should contain a description of the proposal together with a rough estimate of anticipated dollar and time savings. The Engineer will, within a reasonable time, advise the Contractor in writing whether or not the proposal would be considered by the Engineer, should the Contractor elect to submit a detailed cost reduction proposal.

C. A detailed cost reduction proposal shall include without limitation the following information:

1. A description of existing Contract requirements for performing the Work and the proposed change;
2. The Contract items of Work affected by the proposed change, including any quantity variation caused by the proposed change;
3. Pay Items affected by the proposed change including any quantity variations;
4. A detailed cost estimate for performing the Work under the existing Contract and under the proposed change.

Costs of re-design, which are incurred after the Engineer has accepted the proposal, shall be included in the cost of proposed work; and a date by which the Engineer must accept the proposal in order to accept the proposed change without impacting the Contract Time or cost reduction amount.

D. Continuing to Perform Work - The Contractor shall continue to perform the Work according to Contract requirements until the Engineer issues a Change Order incorporating the cost reduction proposal. If the Engineer fails to issue a Change Order by the date specified in the proposal, the proposal shall be deemed rejected.

E. Consideration of Proposal - The Engineer is not obligated to consider any cost reduction proposal. The Engineer will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted. The Engineer will determine in its sole discretion whether to accept a cost reduction proposal as well as the estimated net savings in construction costs from the adoption of all or any part of the proposal. In determining the estimated net savings, the Engineer may disregard the Schedule of Items. The Engineer will establish prices that represent a fair measure of the value of Work to be performed or to be deleted as a result of the cost reduction proposal.

F. Sharing Investigation Costs - As a condition for considering a Contractor's cost reduction proposal, the Engineer reserves the right to require the Contractor to share in the Engineer's costs of investigating the proposal. If the Engineer exercises this right, the Contractor shall provide written acceptance of the condition to the Engineer. Such acceptance will authorize the Engineer to deduct its share of investigation costs from payments due or that may become due to the Contractor under the Contract.

G. Acceptance of Proposal Requirements - If the Contractor's cost reduction proposal is accepted in whole or in part, acceptance will be made by a Change Order. The Contractor's cost of preparing the cost reduction proposal and the Engineer's costs of investigating the

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proposal, including any portion paid by the Contractor, will be excluded from determination of the estimated net savings in construction costs. Costs of re-design, which are incurred after the Engineer has accepted the proposal, will be included in the cost of the Work attributable to cost reduction measures. If the Engineer accepts the cost reduction proposal, the Change Order that authorizes the cost reduction measures will also address any Contract Time adjustment.

SC-19.03 *Force Account Work*

The Materials, Equipment and labor rates and procedures established in this Section apply to Extra Work ordered by the Engineer to be performed as Force Account Work.

A. Extra Work on a Force Account Basis - Before ordering Force Account Work, the Engineer will discuss the proposed work with the Contractor, and will seek the Contractor's comments and advice concerning the formulation of Force Account Work specifications. The Engineer is not bound by the Contractor's comments and advice, and has final authority to: determine and direct the Materials, Equipment and labor to be used on the approved Force Account Work and to determine the time of the Contractor's performance of the ordered Force Account Work.

B. If the Engineer orders the performance of Extra Work as Force Account Work, the Engineer will record, on a daily basis, the Materials, Equipment, labor, and Special Services used for the Force Account Work during that day. The Engineer and the Contractor shall sign the record daily to indicate agreement on the Materials, Equipment, labor, and Special Services used for the Force Account Work performed on that day.

C. The Owner will not be responsible for additional costs that are a direct or indirect result of the Contractor's inefficient means and methods or that reasonably could have been avoided if the Materials, Equipment, labor or services had been obtained at a more commercially reasonable cost.

D. Payment for Force Account Work shall be negotiated and agreed upon by Change Order.

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PART 7

PROFESSIONAL ENGINEER
LICENSED
14693
STATE OF IDAHO
PETER M. STAYTON

August 5, 2020

SPECIAL PROVISIONS

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SPECIAL PROVISIONS TO THE ISPWC, 2017 EDITION

This section amends the Idaho Standard for Public Works Construction (ISPWC) 2017 Edition.

Amend the ISPWC as follows:

DIVISION 500 SEWER

Section 509 – CIPP

Delete the section in its entirety and replace with SP-509 Cured-in-Place Pipe (CIPP) Rehabilitation.

SP-509
CURED-IN-PLACE PIPE (CIPP) SEWER REHABILITATION

PART 1 GENERAL

1.1. SECTION INCLUDES

A. The work covered by this section of the specifications includes all labor, tools, equipment and materials, and performance of all operations in connection with the lining of existing sanitary sewer lines with jointless and seamless cured-in-place pipe (CIPP) as specified herein and as indicated in the Rehabilitation Schedules. Liner shall be a felt liner with high strength and corrosion resistant polyester, vinylester, or epoxy resin.

B. The work shall also include reopening service wyes or tees, removing protruding service connections, etc. When completed, the CIPP shall extend from end-to-end of the section being lined in a continuous jointless, seamless, tight fitting pipe-within-a-pipe as specified herein.

C. The purpose of the relining work is to restore and protect the interior pipe structure and surface and to seal faults in the sewer main to prevent root intrusion, infiltration/exfiltration, structural deficiencies, corrosive attack, etc.

1.2. RELATED SECTIONS

A. Idaho Standard for Public Works Construction (ISPWC) 2017 Edition.

B. SP-512– Sewer Cleaning and Television Inspection

C. SP-513 – Small Diameter (≤ 18-in) Sewer Bypass Pumping

D. SP-1103 – Traffic Control

1.3. REFERENCES

A. The following standards are included in this specification by reference:

1. ASTM D543 – Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
2. ASTM D5813 – Standard Specification for Cured-in-Place Thermosetting Resin Sewer Piping Systems
3. ASTM D638 – Standard Test Method for Tensile Properties of Plastics
4. ASTM D790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
5. ASTM D792 – Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
6. ASTM D883 – Standard Terminology Relating to Plastics
7. ASTM D903 – Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
8. ASTM D1600 – Terminology for Abbreviated Terms Relating to Plastics
9. ASTM D2990 – Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics
10. ASTM F1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube

B. In the case of conflicting requirements between this specification and these referenced documents, this specification shall govern.

1.4. SUBMITTALS

A. Submit the following items prior to installation:

1. Installation Experience:

a. For a Product to be considered Commercially Proven, the Product shall have been installed over at least the previous five years, with a total installed amount exceeding 1,000,000 feet in wastewater collection systems in the U.S. and documented to the satisfaction of the Owner to assure commercial viability.

2. Letters of qualification by the liner manufacturer(s) and the resin supplier(s) certifying the suitability of their products for use in the CIPP process, stating the history of successful application of these products in the CIPP process, and stating that these products have been supplied to and successfully used by the installation contractor.

3. Liner Manufacturer shall have in place a quality management system which complies with the requirements of ISO 9000. Submit certification of compliance with this standard.

4. Quality management system forms and quality records used at each step throughout the fabrication, wet-out, and installation process to demonstrate effective application of quality control methods and verification checks. These forms and quality records are subject to approval by the Engineer.

5. Engineering design calculations for the liner thickness used for installation of the CIPP performed and certified by a Registered Professional Engineer licensed in the State of Idaho. Liner design calculations shall conform to the minimum requirements contained in this specification. The submittal shall also include hydraulic calculations illustrating the impact to hydraulic capacity performed and certified by a Registered Professional Engineer of the State of Idaho.

6. Submit the following product and installation information:

    a. Description of all equipment, tools, and materials to be used during the rehabilitation. Identify which tools and equipment will be redundant on the job site in the event of equipment breakdown. All equipment to be furnished for the project, including proposed backup equipment, shall be clearly described. The Contractor shall outline the mitigation procedure to be implemented in the event of key equipment failure during the installation process.

    b. Contractor’s written certification that thermal curing equipment to be used on the project will exceed the thermal curing requirements of all liners on the project, as required by the liner manufacturer. Provide a description of steam or water boiler equipment including type, number of units, size, capacity and thermal output. List thermal cure requirements in BTU of each liner on the project.

    c. Contractor’s description of the proposed rehabilitation lining methodology for each method required by the contract documents.

    d. Contractor’s description of the proposed procedures for removal of any existing blockages in the pipelines that may be

encountered during the cleaning process (e.g., protruding service taps, roots, etc.).

e. Material Test reports.

f. Material Safety Data Sheets (MSDS) for the liner, resin, catalyst, cleaners and repair agents.

g. Manufacturers' shipping, storage and handling recommendations for:

1. Fabric Tubes.

2. Resin.

h. Certified Test Results from three (3) field installations within the previous 12- month period for the resin and fabric tubes proposed for use on this project that show the materials conform to the Contract Documents. The field sampling procedure shall be in accordance with ASTM F1216 and in accordance with ASTM D5813. Tests shall include, but not necessarily be limited to, physical properties of cured liner, chemical resistance, flexural strength, short- and long-term modulus of elasticity.

i. Contractor's Installation and Cure Schedule: For each diameter and thickness of CIPP liner to be installed, submit an installation and cure schedule identifying the period of time that the sewer will be out of service to affected customers, including the following minimum work items:

1. Liner installation

2. Total cure and cool-down time

3. Lateral reinstatement (for the maximum number of laterals on a single reach on the project)

j. The Manufacturer's narrative cure procedure description.

k. The Manufacturer's recommended cure and cool down schedule for each diameter and thickness of CIPP liner to be installed. The cure and cool down schedule shall take into account the existing pipe material, the resin system, and site specific ground conditions (temperature, moisture level, and thermal conductivity of soil) for each installation on the project in accordance with ASTM F1216, 7.6. The cure and cool down schedule shall include the following minimum information, including the target and acceptable range of variation for each measurement.

Hot Water Curing:

Heat-up Time

Curing Time

Curing Temperature

Post-Curing Time

Cool-down Rate

Interface Temperature

Cool-down Temperature prior to relieving internal pressure

Steam Curing:

Heat-up Time

Curing Time

Curing Air Temperature

Post-Curing Time

Post-Curing Air Temperature

Interface Temperature

Cool-down Rate

Cool-down Temperature prior to relieving internal pressure

l. Theoretical resin amount required for full wet-out per diameter and liner thickness, including liner absorption amount and percent excess resin applied. Express resin quantities on a volumetric and mass basis.

m. Resin Manufacturer's gel test results, including the time and temperature to reach an exothermic reaction.

n. End seal material and manufacturer's required preparation, application, and curing procedures for sealing the CIPP liner to the manhole, including all pertinent test data showing applicability for use with CIPP and concrete products.

o. Continuous temperature monitoring manufacturer's literature including product data, installation method, data viewing method and number of viewers available. Contractor shall submit supporting manufacturer's literature if use of continuous temperature monitoring is proposed for adjustment of cure times or cool-down temperatures from liner manufacturer's recommendations or ASTM F1216 standards.

7. Sewage bypass pumping and/or diversion plan for review by the Engineer per SP-513.

8. Sewage Spill Prevention Plan and Sewage Spill Response Plan

9. Letter to Owner/Engineer stating that the Contractor has conducted an initial inspection of the sewer mains and 1) has determined that the sewer is in a condition suitable for effective application of a cured-in-place pipe, 2) listed and detailed any conditions which may affect the quality of the final product, or 3) indicated why the location and existing conditions would preclude installation of the selected product.

B. Submit the following items at the time of installation or within 24 hours thereafter.

1. A certified copy of the wetout sheet (batch ticket) for each liner delivered to the site and installed, including quality control forms and inspection sheets for each liner.
2. Certified copies of all cure logs submitted each week with the CIPP field samples. Certified copies of all cure logs shall be submitted for each installation to the Owner's representative weekly.
3. All preliminary post-installation television inspection logs and records. At the request of the Owner’s representative, the Contractor shall provide preliminary copies of the post-installation videos for review on a weekly basis.
4. Air temperature log of storage container in which the resin-impregnated liner is held prior to installation. Temperature shall be logged daily, as a minimum. Note any variations in temperature due to malfunctions with refrigerating equipment or other causes. Storage temperature shall not exceed manufacturer’s recommendations at any point prior to cure.
5. All continuous temperature monitoring records for each installation. Data include temperatures for the entire process including installation, cure times and cool down.

C. Submit the following items prior to Substantial Completion.

1. Two copies of pre- and post-installation video inspections and logs on DVD or USB Flash Drive for Owner’s records and Engineer’s use.
2. Copies of all quality control forms and quality records used at each step throughout the fabrication, wet-out, and installation process.
3. CIPP test results from independent testing company.
4. Leakage test results.

1.5. USE OF SEWERS PRIOR TO COMPLETION

A. The Owner hereby reserves the right to make use of any portion of the Work prior to completion of the entire Contract without invalidating the Contract and without constituting acceptance of any of the Work.

PART 2 PRODUCTS

2.1 MATERIALS

A. Fabric Tube

1. The tube shall consist of one or more layers of flexible needled felt or an equivalent non-woven or woven material, or a combination of non-woven and woven materials capable of carrying resin, and compatible with the resin system used. Specialty liners manufactured with fiberglass or glass reinforcement will be evaluated per ASTMF1216 with complete submittal.
2. The fabric tube shall be constructed to withstand installation pressures and curing temperatures, have sufficient strength to bridge missing pipe segments, and stretch to fit irregular pipe sections.
3. The wetout fabric tube shall meet ASTM F 1216- 7.2, and shall have a uniform thickness and excess resin distribution that when compressed at installation pressures will meet or exceed the design thickness after cure.
4. The fabric tube shall be manufactured to a size that when installed will tightly fit the internal circumference, meeting ASTM D 5813, 6.3.1 standards or better, and the length of the original pipe. Allowance should be made for circumferential stretching during installation.
5. The outside layer of the fabric tube (before inversion, as applicable) shall be coated with an impermeable, flexible membrane that will contain the resin and facilitate vacuum impregnation and monitoring of the resin saturation during the resin impregnation (wetout) procedure.
6. The fabric tube felt shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated layer. No material shall be included in the fabric tube that may cause de-lamination in the cured CIPP. No dry or unsaturated layers shall be acceptable upon visual inspection as evident by color contrast between the felt fabric and the activated resin containing a colorant.
7. The wall color of the interior pipe surface of CIPP after installation shall be a light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made. The hue of the

color shall be dark enough to distinguish a contrast between the fully resin saturated felt fabric and dry or resin-lean areas.

8. Seams in the fabric tube shall be equal to or greater in strength than the un-seamed felt fabric.

9. The outside of the fabric tube shall be marked with the name of the manufacturer.

10. The minimum length of the fabric tube shall be that deemed necessary by the installer to effectively span the distance from the starting manhole to the terminating manhole or access point, plus that amount required to run-in and run-out for the installation process, unless otherwise specified.

11. The nominal fabric tube wall thickness shall be constructed to the nearest 1.5 mm increment (or manufacturer's standard increment), rounded up from the design thickness for that section of installed CIPP. Wall thickness transitions, in 1.5 mm increments (or manufacturer's standard increment) or greater as appropriate, may be fabricated into the fabric tube between installation entrance and exit access points. The quantity of resin used in the impregnation shall be sufficient to fill all of the felt voids for the nominal felt thickness.

12. Prior to installation, the liner shall be free of all tears, holes, cuts, foreign materials, and other defects.

B. Resin

1. The resin shall be a corrosion resistant polyester, vinyl ester, or epoxy resin and catalyst system that when properly cured within the tube composite meets the requirements of ASTM F1216, the physical properties herein, and those to be utilized in the design of the CIPP for this project. The resin shall produce CIPP that will comply with the structural and chemical resistance requirements of this specification.

2. The resin shall be able to cure in the presence of water, and the initiation temperature for cure shall be less than 180° F.

3. The activated resin shall contain a colorant compatible with the resin, catalysts and the installation and curing process, such as CreaNova(r) CHROMOCHEM 844-7260 Phthalo-Blue, or equivalent. Colorant addition to the resin shall be sufficient to provide visual contrast between areas of the fabric tube with or without resin.

4. The quantity of resin used for tube impregnation shall be sufficient to fill the volume of all voids in the tube material with additional allowances for polymerization shrinkage and the loss of resin through cracks and irregularities in the original pipe. The amount of resin used shall exceed the

calculated value by five to ten percent (5%-10%). Resin in excess of the calculated value shall be uniformly distributed throughout the length of the liner. The volume of resin required to meet the conditions listed above, shall be calculated for the diameter, thickness and targeted additional allowance of each diameter and thickness of CIPP liner per unit length, typically, per foot, and submitted to the Owner/Engineer for review.

C. CIPP Structural Requirements

1. The CIPP shall be designed per ASTM F1216, Appendix X.1 and assuming no bonding to the existing pipe wall.

2. The design flexural modulus shall be de-rated from the laboratory values published by the resin supplier by an amount that reflects the Contractor's confidence in their field sampling method and that takes into account field conditions that are less ideal than the laboratory environment. The Contractor must have performed long-term testing for flexural creep of the CIPP pipe material installed by its Company. Such testing results are to be used to determine the long-term time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (Tube and Resin) and general workmanship of the installation and curing as defined within the relevant ASTM Standard. A percentage of the instantaneous flexural modulus value (as measured by ASTM D790 testing) will be used in design calculations for external buckling. The percentage, or the long-term creep retention value utilized, shall be verified by this testing. Retention values exceeding 50 percent of the short-term test results shall not be applied unless substantiated by qualified third party test data to the Engineer's satisfaction. The materials utilized for the project shall be of a quality equal to or better than the materials used in the long-term test with respect to the initial flexural modulus used in the CIPP design.

3. The Enhancement Factor "K" to be used in 'Partially Deteriorated' design conditions shall be assigned a value of 7. Application of Enhancement (K) Factors in excess of 7 shall be substantiated through independent test data.

4. The cured pipe material (CIPP) shall conform to the structural properties listed below:

   a. Minimum Physical Properties for felt CIPP.

Property	Test Method	Cured Composite Per ASTM F1216
Flexural Modulus of Elasticity	ASTM D-790 (short term)	250,000 psi
Flexural Strength	ASTM D-790	4,500 psi

b. The required structural CIPP wall thickness shall be based on the physical properties in this Section and in accordance with the Design Equations in the appendix of ASTM F1216, and the following design parameters. In no case shall the nominal (finish cured) thickness be less than 6.0 mm for pipe diameters 8-inch and larger and 4.5 mm for 6-inch diameter pipes.

Design Safety Factor	2.0
Retention Factor	50%
Ovality	2% minimum, or actual if ≥2%
Modulus of passive soil reaction	1,000 psi
Groundwater Depth.....	at ground surface
Soil Depth (above the crown)	Varies, See Plans
Live Load	H-20 Highway
Soil Load	130 lb/cu. ft.
Minimum service life	50 years
Pipe Condition.....	Fully deteriorated

D. CIPP Physical Requirements

1. Chemical resistance - The CIPP shall meet the chemical resistance requirements of ASTM F1216. CIPP samples tested shall be of the fabric tube and resin proposed for use on this project. It is required that CIPP samples with or without plastic coating meet these chemical testing requirements.

2. Hydraulic Capacity - The hydraulic profile shall be maintained as large as possible. The CIPP shall have a minimum of the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using a commonly accepted roughness coefficient for the existing pipe material taking into consideration its age and condition.

E. End Sealing

1. Each end of the CIPP shall be sealed to provide a watertight seal between the original pipe and the CIPP liner. Sealing materials shall be compatible with the original pipe material and shall be suitable for application to moist surfaces.

2. Unless specified in the Overall Rehabilitation Schedule, acceptable end sealing products include:

a. **ES-1:** A quick setting fiber reinforced calcium aluminate sulfate resistant cementitious material. Product shall be Strong-Seal QSR, or approved equal.

b. **ES-2:** A two component, 100% solids, solvent-free, moisture tolerant, high-modulus, high-strength, structural epoxy paste adhesive conforming to ASTM C-881, Types I and IV, Grace-3, Class-B and C. Product shall be Sikadur 31, Hi-Hod Gel manufactured by Sika, NPR-5305 manufactured by Neopoxy, or approved equal.

c. **ES-3:** A single component hydrophilic polyurethane sealant. Product shall be Swellseal WA manufactured by DeNeef, or approved equal.

d. **ES-4:** A single component hydrophilic neoprene rubber compression gasket. Product shall be LMK, or approved equal.

PART 3 EXECUTION

3.1. GENERAL

A. The Contractor may utilize any of the existing manholes in the project area as manhole access points. Coordinate work with related, adjacent aspects of work. If a street must be closed to traffic because of the orientation of the sewer, the Contractor shall provide traffic control measures as required in SP-1103

B. The Contractor shall implement a public notification program regarding individual sewer service outages and contact each home or business connected to the sanitary sewer to inform them of the nature, duration, and expected date of any interruption in service. If necessitated by the business, Contractor shall provide temporary sanitary facilities specifically for use by the business for the duration of construction affecting that business. Nighttime work shall not be permitted except as indicated in the Supplementary Conditions or as authorized by Owner. During the course of the rehabilitation and any associated service interruption, the residents or businesses shall be kept regularly informed regarding any matters that affect them. The Contractor shall also provide:

1. Written notice to be delivered to each resident or business on three separate occasions as follows: 1) one week, 2) forty-eight hours and 3) twenty-four hours prior to beginning construction activity on the segment of sewer.

2. Information on the written notice shall include a brief description of work, anticipated time frame, project phasing points, traffic impacts,

Contractor contact phone number, how services will be maintained, and any additional information on minimizing construction impacts.

3. The example flyer **attached** at the end of this section shall be used for project notification. This flyer will be made available to the Contractor in digital format and may be modified slightly to update contact information or details pertinent to this project.

C. Implement traffic control devices per SP-1103.

3.2. MATERIAL STORAGE AND TRANSPORTATION

A. TRANSPORTATION AND HANDLING

1. Transport and handle products in accordance with manufacturer's instructions.
2. Promptly review shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
3. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

B. STORAGE AND PROTECTION

1. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
2. For exterior storage of fabricated products, place on sloped supports, above ground.
3. Provide off-site storage and protection when site does not permit on-site storage or protection.
4. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
5. Arrange storage of products to permit access for review. Periodically review to assure products are undamaged and are maintained under specified conditions.

3.3. SEWER LINE PREPARATION

A. Cleaning of Sewer Lines - The Contractor shall remove all internal debris from the sewer line that will interfere with the installation of CIPP per SP-512. Liquid waste similar in character to domestic wastewater may be discharged in the sewer at the downstream end of this project. Gravel or other debris shall be retained and disposed of according to local, State, and Federal regulations by the Contractor.

B. Bypass Sewage Pumping shall be performed per SP-513 and be in place prior to installation. The Contractor shall limit interruption of sanitary sewer service to each facility connected to the sewer reach as noted in below, and/or provide such other temporary sanitary facilities as may be required during the execution of work. If sewage backup occurs and enters a facility, the Contractor shall be responsible for clean-up, repair, property damage costs, and all claims, at no cost to the Owner.

1. Maintain sanitary sewer service at all times. If sewage backup occurs during cleaning, liner installation, or other construction activities and enters a facility, the Contractor shall be responsible for cleanup, repair, property damage, costs, and all claims at no cost to the Owner.

a. Main Lines: Bypass pumping, temporary piping, and any other measures required to maintain sanitary sewer service per SP-513.

b. Service Lines: The maximum outage for service lines shall be four hours for businesses and six hours for individual residences. Contractor shall coordinate with affected parties and coordinate activities and schedules.

i. Pipe reaches in the downtown corridor, as specified in the overall rehabilitation schedule, shall only have service outages between the hours of 11 pm and 8 am.

c. If these outage limits cannot be satisfied, Contractor may be required to work alternate or evening hours to minimize impacts to businesses or residences.

C. Contractor shall perform pre- and post-installation video inspections of the pipelines per SP-512. Only experienced personnel trained in locating breaks, obstacles and service connections by closed circuit television shall perform the inspection. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation of CIPP into the pipelines, such as protruding service taps, collapsed or crushed pipe, and significant reductions in the cross sectional area. Known problems are shown or generally noted on the rehabilitation schedules or noted as point repairs. If

additional conditions are noted that affect installation, Contractor shall notify the Engineer in writing requesting clarification on how to proceed. A video record and suitable log shall be kept and submitted to the Owner and Engineer per SP-512.

D. Line Obstructions – Protruding service laterals that will interfere with the installation and long-term performance of the CIPP shall be removed.

E. The Contractor shall be responsible for confirming the locations of all lateral service connections prior to installing and curing the CIPP. Contactor shall coordinate with residents, as necessary. Owner reserves the right to conduct dye testing or other field investigation to determine if service is active.

3.4. LINER INSTALLATION

A. All point repairs shown on the rehabilitation schedules shall be completed prior to liner installation unless noted otherwise or approved by the Engineer.

B. All structural or corrosion protection manhole coatings shown on the rehabilitation schedules and Plans shall be completed following liner installation unless noted otherwise or approved by the Engineer.

C. All materials used throughout the installation process, including but not limited to oils and resin materials, shall be contained within the sewer collection system. Materials used in construction shall not enter the stormwater collection system. All streets, sidewalks and manhole lids shall be clean of installation materials, including oils and resins, following installation.

D. If installation of liner should fail for any reason and the liner removed from pipe reach, the liner shall not be reused for rehabilitation of original or other pipe reach.

E. Resin Impregnation - The person in charge of the Contractor's wetout process shall submit a certified wetout sheet that shows the quantity of resin placed into the fabric tube, and certifies that the information is accurate and the resin was distributed uniformly throughout the fabric tube, as noted. A vacuum impregnation process shall be used. To ensure thorough resin saturation throughout the length of the felt tube the level of the vacuum and the speed of the resin advance shall be coordinated so that white spots (dry areas) at the inside surface of the flexible membrane shall be small, shallow, less than 10 percent of the fabric tube wall thickness or 3-mm, whichever is less, and be less than 1 percent of the volume of the resin per unit length.

F. A roller system shall be used to uniformly distribute the resin throughout the tube. The roller gap dimension shall be calculated by a method that determines the correct volume of resin/felt per unit length (foot, yard or meter), contained within the confining perimeter of the flexible membrane.

G. Care shall be taken not to damage the deformed pipe or existing sewer lines or manholes during the installation. Appropriate sleeves and rollers shall be used to protect the liner.

H. The CIPP Liner shall be installed and cured in the host pipe per the manufacturer's instructions, following the methods indicated in the materials submitted under this specification. CIPP installation shall be in accordance with ASTM F1216, Section 7, except as modified herein.

I. Curing shall be accomplished by utilizing hot water or steam under hydrostatic pressure in accordance with the manufacturer's recommended cure schedule. The heat source in and output temperatures shall be monitored and logged during the cure and cool down cycles at 5 minute intervals. Contractor shall submit manufacturer literature if use of the continuous temperature monitoring adjusts cure times.

J. During overnight installations, provide noise abatement of portable power generation equipment and pumps to limit noise to 70dba or less at a distance of 30 feet from noise source.

K. The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing water or steam supply.

L. Temperature monitoring shall be end of liner or continuous as described below and where specifically noted in the rehabilitation schedule.

1. End of liner temperature monitoring shall be required during the CIPP process where specifically noted in the rehabilitation schedule and shall be incidental to bid. Prior to installation remote temperature gauges (thermocouple wires) shall be placed inside the host pipe and the CIPP liner at the invert level and crown (6- and 12- o’clock positions) of each end to monitor the temperatures during the cure cycle. Liner and host pipe interface temperature shall be monitored and logged during cure and cool down.

2. Continuous liner temperature monitoring shall be required during the CIPP process where specifically noted in the rehabilitation schedule and shall reference Section 4 for measurement and payment when applicable. Sensors shall be strategically placed at points where a

significant heat sink is likely to be anticipated. The fiber optic system shall be connected to a laptop computer and collect temperature readings and log data for continuous monitoring during cure and cool-down, as well as, future analysis and documentation of the temperature gradients during all aspects of the curing process, including heating, exotherm, curing, and cool-down of the CIPP installation. The system shall also provide a secure web-based application that will allow 2 seats for the Owner and Engineer to log in from a computer and/or smartphone and monitor the cure and cool-down process remotely for the entire duration. Such access shall be provided through cellular service. Contractor shall provide end of the liner temperature monitoring in accordance with these specifications with all continuous temperature monitoring.

M. Cool Down

1. The Contractor shall initiate a controlled cool-down to cool the hardened liner in accordance with ASTM F1216, 7.7, until the temperature at the invert level and crown (6- and 12-o'clock positions) at both ends of the liner reaches the level specified by the liner manufacturer, but no greater than 113°F for steam cure or 100°F for heated water cure, as measured by remote temperature gauges, before relieving the internal pressure or static head within the section. Air used in the cool down stage shall not be cooled below ambient air temperature before introduction to the rehabilitated pipe.

2. Temperatures shall be monitored and recorded throughout the installation process at 15 minute increments, as required by the manufacturer's cure schedule, and/ or as otherwise required by the Engineer to ensure that each phase of the process is achieved at the approved manufacturer's recommended temperature. Temperature records for each cure shall be available to the Engineer at all times and submitted to the Owner and Engineer on a weekly basis, as a minimum.

3. The Contractor shall not release untreated styrene in cure water, if water inversion/cure method is used. Acceptable methods are as follows:

   a. **Containment of the cure water:** Containment shall be required until the styrene has sufficiently oxidized. Laboratory test results will be required to demonstrate the absence of styrene prior to the release into the collection system.

   b. **Treatment of the cure water:** Treatment with non-hazardous chemicals, such as ammonium persulfate (Styredux), is required to treat the cure water until the styrene concentration is less than 10 ppm before releasing cure water to the collection system. Contractor

must submit a narrative description of proposed process for the styrene reduction, minimum dose and holding time calculations, and any other information as requested by the Engineer to demonstrate effectiveness of the proposed method.

N. Finish

1. The finished lining shall be continuous over the entire length of an installation run and be free from visual defects such as foreign inclusions, dry spots, pinholes, and de-lamination. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to inside the lined pipe.
2. Any defect, which will or could affect the structural integrity or strength of the linings, shall be repaired at the Contractor's expense. Contractor shall propose a repair method for approval by the Owner and Engineer.

3.5. QUALITY CONTROL

A. QUALITY ASSURANCE/CONTROL OF INSTALLATION

1. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
2. Comply fully with manufacturers' instructions, including each step in sequence.
3. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
4. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

B. CONSTRUCTION OBSERVATION AND TESTING LABORATORY SERVICES

1. The Owner shall employ and pay for engineering and observation during construction for quality assurance. Contractor shall employ and pay for services of an independent testing laboratory and firm acceptable to the Engineer for quality control.
2. The Owner’s representative shall oversee observation of all tests run in the field. Contractor shall coordinate all required testing with the Owner’s representative.

3. The Contractor shall be responsible for providing the equipment and manpower to assist the Engineer in taking additional tests for quality assurance.

4. The Contractor shall provide the equipment and manpower and conduct all tests on underground utilities as required in the specifications at his expense.

5. The Contractor shall notify the Engineer of the time in which tests are to be run twenty-four (24) hours prior to testing.

6. Reports will be submitted to the Engineer, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.

7. Cooperate with the Engineer; furnish samples of materials, mix designs, equipment, tools, storage, and assistance as requested.

    a. Notify Engineer and independent firm 24 hours prior to expected time for operations requiring services.
    b. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

8. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm at no cost to the Owner on instructions by the Owner’s Representative. Reference to original failing test shall be referenced.

3.6. LEAKAGE TESTING

A. Testing shall be performed after the CIPP has cooled per manufacturer’s recommendation. The liner shall be tested before it has been sealed in-place at the manholes and prior to service lateral reinstatement.

B. Low Pressure Air Test Procedure

1. After a manhole-to-manhole section of the existing host conduit has been replaced, and prior to any service lines being connected to the replacement pipe, the pipe shall be plugged at each manhole with pneumatic plugs.

2. The design of the plugs shall be such that they will hold against the test pressure without requiring external blocking or bracing. One of the plugs shall have three air hose connection: one to inflate the plug, one to attach the gauge to read the air pressure in the sealed line, and one to introduce air into the sealed line.

3. Low pressure air shall be introduced into the sealed line until the internal air pressure reaches 4.0 psi greater than the average back pressure due to groundwater pressure on the pipe. At least two minutes shall elapse to allow the pressure to stabilize.

4. The time required for internal pressure to decrease from 3.5 to 2.5 psi greater than the average back pressure (groundwater pressure) on the pipe, shall not be less than the time shown in the following table for the given pipe diameter:

New Pipe Diameter	Minimum Elapsed Time
8-inch and smaller	4 minutes
10-inch	5 minutes
12-inch	6 minutes
15-inch and larger	7 minutes

C. Hydrostatic Exfiltration Testing – As an alternative to the Low Pressure Air Test, pipes 24 inches in diameter or greater may be tested by hydrostatic exfiltration per ISPWC Section 501.3.4.D.

3.7 INSPECTION AND TESTING

A. The Contractor shall prepare a minimum of two CIPP samples for each pipe size used on the project (8-inch diameter and greater) for testing in accordance with ASTM F1216. One sample from each of the following two methods shall be provided.

1. For host pipe diameters 18 inches and smaller: The sample shall be cut from a section of cured CIPP at an intermediate manhole or at the termination point that has been inverted through a like diameter pipe which has been held in place by a suitable heat sink, such as sandbags.

2. For host pipe diameters greater than 18 inches: The sample shall be fabricated from material taken from the tube and the resin/catalyst system used and cured in a clamped mold placed in the downtube when circulating heated water is used and in the silencer when steam is used.

B. The samples for each of these cases shall be large enough to provide a minimum of three specimens. After the sample is cured and removed, the following tests shall be performed by an independent third party. Contractor shall bear all costs for testing. Submit results to the Engineer in duplicate.

1. Short-Term Flexural (Bending) Properties-The initial tangent flexural modulus of elasticity and flexural strength shall be measured for gravity

and pressure pipe applications in accordance with ASTM D 790 and shall meet the requirements of Section 2.1.C.4.

2. Take wall thickness measurements in accordance with ASTM D5813. Make a minimum of eight measurements at evenly spaced intervals around the circumference of the pipe to ensure that minimum and maximum thicknesses have been determined. Wall thicknesses that exceed the design thickness by the greater of 2 mm or 15% may be considered non-compliant if, in the judgment of the Engineer, this will impede O&M, hydraulic capacity, future work, etc. The average cured liner thickness should be calculated using all measured values and shall meet or exceed minimum design (nominal) thickness per the contract documents. The average cured liner thickness shall be calculated using all measured values and shall meet or exceed minimum nominal (finish cured) thickness per the contract documents.

3. Sample outside diameter, measured at the pipe quadrants.

C. Finished CIPP liner shall be free from wrinkles totaling more than 5% of host pipe inside diameter, or ½”, whichever is greater.

D. Post-Installation Television Inspection

1. The Contractor shall perform a post-installation television inspection of the installed replacement pipe in accordance with SP-512 Sewer Cleaning and Television Inspection.

2. The Contractor shall verify the connection of all service laterals and that the liner was not damaged during installation.

3. All post-installation television inspection logs and records shall be submitted weekly to the Engineer for final approval. Any additional work to reconnect services or repair damaged CIPP shall be conducted by the Contractor at no additional cost to the Owner.

E. Any defects in the liners which will affect the integrity or strength of the liners, in the opinion of the Engineer, shall be repaired by the Contractor at no expense to the Owner in a manner satisfactory to the Engineer.

3.8 LATERAL REINSTATEMENT

A. The exact location and number of service connections shall be determined by the Contractor. It shall be the Contractor’s responsibility to accurately field locate all existing service connections, whether in service or not.

B. The Contractor shall reconnect all service connections to the liner immediately following testing unless noted otherwise in the rehabilitation schedules or directed otherwise in writing by the Engineer / Owner.

C. The Reinstatement method shall be robotic cutting from pipe interior.

D. Service connections shall be restored to not less than 90 percent and not more than 105 percent capacity and shall have smooth flow line.

E. The Contractor shall be responsible for restoring and/or correcting, without any delay, all missed or faulty reconnections, as well as for any damage or costs to property owners for not reconnecting services designated for reinstatement.

3.9 PROTRUDING SERVICE TAPS

A. Method shall be robotic cutting from pipe interior.

3.10 CLEAN-UP

A. Upon acceptance of the installation work and testing, the Contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work.

PART 4 MEASUREMENT AND PAYMENT

4.1 CIPP Rehabilitation to be measured in accordance with the following and as identified on the Bid Schedule.

A. CIPP Rehabilitation: By the linear foot for the pipe size indicated on the Bid Schedule measured on a horizontal basis for each manhole-to-manhole reach. Includes moving equipment from reach to reach, set up for installation, materials, labor, tools, testing, surface restoration, reinstating drop manholes, and related work described in the Contract Documents.

1. Bid Schedule Payment Reference: SP-509.4.1.A.1.
Bid Schedule Description: CIPP Rehabilitation *[pipe size]*… linear foot (LF).

B. Cut of Protruding Laterals: On a per each basis for removing protruding service connections. Includes moving equipment from reach to reach, set up for removal, labor, tools, clean-up and disposal and related work described in the Contract Documents.

1. Bid Schedule Payment Reference: SP-509.4.1.B.1.
Bid Schedule Description: Cut off Protruding Laterals… per each (EA).

C. Lateral Reinstatement: On a per each basis for internally reinstating laterals on the main line with a remote controlled cutter or by man entry. Includes moving equipment from reach to reach, set up for reinstatement, pre-construction logging of service locations, labor, tools, clean-up and disposal, and related work described in the Contract Documents.

1. Bid Schedule Payment Reference: SP-509.4.1.C.1.
   Bid Schedule Description: Lateral Reinstatement… per each (EA).

END OF SECTION

SEWER MAIN WORK SCHEDULED

The City of Sandpoint has scheduled a City sewer main rehabilitation project in your area. The method of rehabilitation has been chosen by the City to minimize construction impacts to you. The work will be completed by accessing nearby manholes only; no excavation is anticipated for this work. Construction impacts are expected to be limited to less than one day in your area.

_____
Street or alley

_____
Date(s)

Here's how you may be affected (only the marked conditions apply to this project):

- ☐ Please do not use your laundry and dish washer, and limit other water use for the day to facilitate sewer main work.
- ☐ Your driveway may be blocked for brief periods on the date(s) listed above. You may need to make alternate plans for parking on the date and times listed above
- ☐ This work will occur during daytime hours, involving the operation of motorized equipment near your home or place of business
- ☐ This work will occur during nighttime hours, involving the operation of motorized equipment near your home or place of business
- ☐ Other:

_____
_____
_____
_____
_____

Thank you for your patience. If you have any questions, please contact the City Public Works Department at the numbers listed on the back.

PROJECT NAME

2020 CIPP Project

CONTACTS

Bryan Card
Project Manager
208.964.2061

Section 512 – Sewer Cleaning and Television Inspection

Add section SP–512 Sewer Cleaning and Television Inspection as follows:

SP - 512
SEWER CLEANING AND TELEVISION INSPECTION

PART 1 GENERAL

1.1. SECTION INCLUDES

A. Requirements for cleaning and television inspection of sewers

1.2. RELATED SECTIONS

A. Idaho Standard for Public Works Construction (ISPWC) 2017 Edition.

B. SP–509 – Cured-in-Place Piping (CIPP) Sewer Rehabilitation

1.3. SUBMITTALS

A. Submit Manufacturer Specifications for Television Equipment and Appurtenances.

B. Submit example video inspection tapes and reports to determine video quality and capabilities.

PART 2 PRODUCTS

2.1 CAMERA AND APPURTENANCES

A. Television camera and apparatuses specifically designed and constructed for inspections of sewers that meet the following requirements:

1. Camera shall be capable of recording digital images.
2. Operative in one hundred (100) percent humidity conditions and under water.
3. Lighting quality that sufficiently lights the sewer so a clear, in-focus picture of a minimum of six (6) linear feet of the inside periphery of the sewer is obtained.
4. A minimum of six hundred (600) lines of resolution in color.

5. Variable intensity control on the lights to meet all lighting conditions so a clear, in-focus picture is obtained.
6. A camera monitor capable of continuous six hundred (600) line per inch resolution in color for instant viewing television inspection in progress, located within a temperature controlled studio that allows adequate seating for two persons.
7. A pan-and-tilt camera capable of viewing perpendicular to the sewer. The camera shall be capable of 360 degree rotation. Adequate lighting shall be provided under pan-and-tilt conditions so a clear, in-focus picture is obtained.
8. A video recorder that records the closed-circuit television inspection on a DVD or compact disk (CD), complete with visual so the Technician can record information as it appears on the monitor. Copies submitted to Owner and Engineer shall be on DVD or USB Flash Drive.
9. Control equipment that allows the operating technician to have complete control of the camera at all times and that allows a uniform travel speed of a maximum of thirty (30) feet per minute.
10. The entire system shall operate with its own power source.
11. A system that measures and displays on the video the footage with an accuracy of plus or minus six (6) inches in five hundred (500) feet.

B. Cameras shall be capable of navigating main lines with diameters as noted on the rehabilitation schedules.

PART 3 EXECUTION

3.1. GENERAL

A. Cleaning and video inspection is required to identify pipe condition, areas that may affect rehabilitation, service line locations, configurations, and acceptability for liner installation.

3.2. RECORDS

A. Keep records of all television inspection work on a digital form that includes the following information. Submit original copies to Engineer or Representative at the completion of each television inspection run.

1. Project.
2. Date and Time of Inspection.
3. Contractor.

4. Engineer.
5. Name of Operating Technician.
6. Size of Sewer and material(s) of construction.
7. Entry (Beginning) and Exit (Ending) Manholes. These shall correspond to the manhole names/ numbers listed on the rehabilitation schedules.
8. Distance to all Service Connections from Entry Manhole.
9. Points-of-Interest which may Affect Work (Protruding Taps, Offset Joints, Blockages, Roots, etc.).
10. Distance to all Points of Interest from Entry Manhole.
11. Total Length of Line.
12. Unusual Conditions.

B. Complete the form digitally and in PDF format.

C. A video record of the television inspection shall be recorded at the time of inspection on a DVD, compact disk (CD) or USB flash drive. A copy of the video record shall be made and maintained by the Contractor. The original copy of the DVD or CD and inspection form shall be submitted to the Engineer or Representative at the completion of each television inspection run.

3.3. CLEANING

A. The Contractor shall provide all equipment and personnel necessary to clean the lines of interest for this project prior to TV inspection.

B. Cleaning and required equipment shall be to the extent necessary to allow for a television inspection of the lines, and to allow for the required construction to be performed.

1. The existing main lines have varying levels of root intrusion. Contractor shall remove all roots within the sewer main to the pipe walls and lateral connections to a level acceptable to Engineer prior to commencing pipe rehabilitation.
2. Grade problems may exist in some sections. Contractor shall fully remove debris from the entire reach.
3. The existing main lines may have varying levels of damage. Contractor shall take all necessary precautions to insure no additional damage is caused to the pipe. If conditions exist that prevent cleaning from being accomplished or where additional damage would result if cleaning were attempted or

continued, Contractor shall immediately notify Owner and Engineer of specific sections before proceeding.

C. Liquid waste similar in character to domestic wastewater may be discharged in the sewer at the downstream end of this project. CIPP fragments, gravel, or other debris shall be retained and disposed of according to local, State and Federal regulations by the Contractor.

D. All debris generated during the cleaning process shall be collected and properly disposed of at an approved site to be coordinated between Owner, Engineer, and Contractor.

E. All reasonable precautions shall be made to prevent blow-back into services during cleaning operations.

F. The line shall be re-cleaned and re-inspected, at the Contractor's expense, if the initial CCTV inspection shows incomplete cleaning and/or removal or debris and roots.

3.4. VIDEO INSPECTION

A. The Contractor shall provide all equipment and personnel necessary to perform CCTV inspection on lines as required for this project.

B. The Contractor shall provide bypass pumping or utilize jetting during video inspection to provide full pipe visibility, including visibility of the flow line. If full pipe visibility is not obtained, repeat the closed-circuit television inspection until full pipe visibility is obtained. Repeating the television inspection process to obtain a clear video recording will be at no additional cost to the Owner.

C. The CCTV inspection shall reference manhole ID names/numbers as shown on the rehabilitation schedules.

D. The television inspection and video record of the sewer shall provide a clear, in-focus color picture of a minimum of six (6) linear feet of the inside periphery of the sewer. Do not exceed thirty (30) feet per minute travel speed.

E. Stop at all service connections in the sewer so they are displayed on the screen, and record the distance from the entry manhole on the form and on audio. Provide a 360 degree view of the service connection with the pan-and-tilt camera.

F. Stop at all points-of-interest in the sewer so they are displayed on the screen, and describe the type of point-of-interest and distance from the entry manhole

on the form and on audio. Provide a 360 degree view of the point-of-interest with the pan-and-tilt camera.

G. Stop at all unusual conditions in the sewer so they are displayed on the screen, and describe the unusual condition and distance from the entry manhole on the form. Provide a 360 degree view of the unusual condition with the pan-and-tilt camera.

H. If a clear video recording is not obtained or points of interest and unusual conditions are not documented and clearly displayed on the video, repeat the closed-circuit television inspection until a clear, in-focus video is obtained. Repeating the television inspection process to obtain a clear video recording will be at no additional cost to the Owner.

PART 4 MEASUREMENT AND PAYMENT

4.1 Sewer Cleaning and Television Inspection to be measured in accordance with the following and as identified on the Bid Schedule.

A. Cleaning and Television Inspection for Main Sewer Line: By the linear foot for sewer lines measured on a horizontal basis for each manhole-to-manhole reach. Includes cleaning, root removal, equipment set up at each reach, inspection, equipment, labor, tools, recording, documenting and submitting, property owner coordination, and all related work as described in the Contract Documents.

1. Bid Schedule Payment Reference: SP-512.4.1.A.1.
Bid Schedule Description: (Pre-/Post-) Construction Cleaning and Television Inspection of Main Sewer Line … linear foot (LF).

END OF SECTION

Section 513 – Small Diameter (≤ 18-in) Sewer Bypass Pumping

Add section SP-513 Small Diameter (≤ 18-in) Sewer Bypass Pumping as follows:

SP - 513
SMALL DIAMETER (≤ 18-in) SEWER BYPASS PUMPING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Bypass Sewage Pumping Requirements

1.2 RELATED SECTIONS

A. Idaho Standard for Public Works Construction (ISPWC) 2017 Edition.

B. SP–509 – Cured-in-Place Pipe (CIPP) Sewer Rehabilitation

1.3 DESCRIPTION AND GENERAL REQUIREMENTS

A. Bypassed sewage shall be pumped back into the sanitary sewer system in a downstream segment or another sanitary sewer drainage basin. Other alternatives will not be allowed.

1. In no case shall flow be diverted from one reach to another reach with a smaller pipe size. Additional restrictions may be noted on the Plans.
2. The suggestions in the Plans and the Contract Documents are conceptual in nature and are included solely for the general use of the Contractor when preparing a detailed plan.
3. Contractor shall develop a detailed bypass sewage pumping plan and submit the plan to the Engineer and Owner for review for general compliance with the Contract Documents. Review and approval by Owner and/or Engineer shall not relieve the Contractor from complying with the provisions of the Contract Documents, including responding to variable flows in the collection system.

B. Sewage flow shall be maintained at all times around the construction operations. The bypass shall be made by plugging the line under construction at the upstream manhole and pumping the flow into a downstream manhole or adjacent system with adequate capacity.

C. Contractor shall have spare parts and pipe available on-site to make emergency repairs if needed. Spare parts shall include plugs for each pipe diameter, pump, piping and all other materials needed for bypass pumping.

D. When required, services shall be bypassed by plugging the service downstream of a cleanout or private manhole and pumping the flow into a downstream manhole. Provide ancillary controls for monitoring to ensure bypass pumping is adequate and that flow does not surcharge the service. This project requires the following service to be bypassed during operations to maintain uninterrupted service:

1. Bonner General Hospital, 520 N 3rd Ave
2. La Quinta Inn, 415 Cedar Street
3. Quality Inn, 807 N. Fifth Ave

E. The pump and bypass lines shall be of adequate capacity, size, and quantity to handle all bypass sewage flows, including those due to infiltration and inflow. Contractor shall determine the actual bypass pumping requirements based on actual flows in the system and provide such additional equipment and resources as may be required to handle all incoming flows during construction.

F. It may be possible to plug the line at the upstream manhole without pumping, if the installation of the replacement pipe occurs in an adequate amount of time such that sewage does not back up into facilities connected to the upstream reaches. Contractor shall monitor flows and proceed as dictated by incoming flows to prevent damage to upstream residences and buildings. In the event storage is not available, Contractor shall implement all necessary bypass measures to prevent damage to upstream facilities.

G. The Contractor shall be responsible for continuity of sanitary sewer service to each facility connected to the sewer reach being replaced or rehabilitated during the execution of work.

H. When flow depth is greater than fifty percent of pipe diameter, the Contractor shall provide personnel to completely and continuously monitor sewage bypass pumping, both upstream and downstream of the point being isolated as well as service lines that require bypassing.

I. During overnight installations, provide noise abatement of portable power generation equipment and pumps to limit noise to 70dba or less at a distance of 30 feet from noise source.

1.4 SUBMITTALS

A. Submit a sewage bypass pumping and/or diversion plan for review by the Engineer at least 14 days prior to pipe or liner installation. The sewage bypass pumping and/or diversion plan shall include, but not necessarily be limited to, the number and capacity of all pumps to be used, intended bypass locations, primary contact for bypass operations, spill control procedures, safety measures in the event of uncontrolled discharge, and an emergency response plan to be followed in the event of failure of the bypass pumping and/or diversion system.

B. The Contractor's plan for sewage bypass pumping and/or diversions shall be satisfactory to the Engineer and Owner before the Contractor shall be allowed to commence sewage bypass pumping and/or diversion.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 OPERATIONS

A. Contractor shall notify the Owner and Engineer 48 and 24 hours prior to commencing bypass pumping operations.

B. Monitor flows upstream and downstream of the bypass pumping operations. In the event insufficient bypass pumping is being provided, add such additional equipment as may be necessary to adequately convey incoming flows and deliver the flows to downstream portions of the collection system. Such additional equipment and operations may include the following: pumps, discharge lines, controls, alternate pumping locations, alternate discharge locations with the approval of the Owner and Engineer, etc.

C. Maintain bypass pumping operations for the duration required to accommodate adjacent construction activities.

PART 4 MEASUREMENT AND PAYMENT

4.1 Small Diameter (≤18-in) Sewer Bypass Pumping to be measured in accordance with the following and as identified on the Bid Schedule.

A. Small Diameter (≤18-in) Sewer Bypass Pumping: On a lump sum basis for providing bypass sewage pumping and additional items as required to maintain continuous operation of the collection system. Includes equipment, power

supply, mobilization from reach to reach, labor, ancillary controls, coordination with the Owner and affected property owners, monitoring, any modification to manhole structures or surface repair, and all other related work as described in the Contract Documents to complete the work.

1. Bid Schedule Payment Reference: SP-513.4.1.A.1
   Bid Schedule Description: Small Diameter (≤18-in) Sewer Bypass Pumping… lump sum (LS).

END OF SECTION

DIVISION 1100 TRAFFIC

Section 1103 – Construction Traffic Control

Delete section in its entirety and replace with SP-1103 Traffic Control as follows:

SP-1103
TRAFFIC CONTROL

PART 1 GENERAL

1.1 SECTION INCLUDES

A. The work covered in this section shall apply to all work which requires measures to protect pedestrian, bicycle, and vehicular traffic. All traffic control requirements shall be completed in conformance with the manual on Uniform Traffic Control Devices (MUTCD), Idaho Transportation Department (ITD) Standard Specifications Section 107.6 (Traffic Control Devices) and Section 626 (Construction Traffic Control Devices), and City of Sandpoint Standards.

1.2 RELATED SECTIONS

A. Idaho Standard for Public Works Construction (ISPWC) 2017 Edition.

1.3 DESCRIPTION AND REQUIREMENTS

A. A construction and traffic control plan and schedule indicating areas and type of work to be performed shall be submitted by the Contractor for review by the City of Sandpoint as part of the Contractor's Access Permit request for work on Sandpoint streets prior to starting work on the Project. The plan shall include proposed detours and any necessary traffic control devices. Contractor shall not perform any work in the City right-of-way without an approved Access Permit from the City.

B. Work performed within Fifth Avenue (U.S. Highway 2) shall require an encroachment permit from the Idaho Transpiration Department (ITD). Owner will obtain the permit 15 days prior to commencing work in this area. Encroachment permit shall be signed by the City of Sandpoint prior to submission to ITD.

C. A minimum of two working days notice shall be given before any change in the schedule is made.

D. The traffic control plan shall be submitted to Owner and Engineer for approval prior to starting work on the project.

E. The Contractor shall provide an individual or individuals trained in traffic control to maintain and monitor required traffic control. Such individual or individuals shall have traffic control as a primary responsibility and duty and shall be available at all times that work is in progress to perform these duties. The Contractor is responsible for monitoring and maintaining traffic control devices during non-working days and non-working hours. During non-working days and non-working hours, an individual shall be available to perform maintenance of traffic control devices as necessary. Such individual need not be on duty but shall be readily available by telephone contact. During non-working days, such individual shall review project traffic control at least once per day and perform any maintenance required.

F. Work on major arterials (e.g. Cedar Street, Fifth Avenue and U.S. Highway 2) shall utilize traffic control measures to maintain through vehicle access at all times without detours unless specifically approved by Owner and Engineer. If traffic is to be constricted to a single direction, provide flaggers at all times. All traffic restrictions shall be approved in advance by the Owner and Engineer as part of Contractor's access permit.

1.4 DETOURS

A. Detours, both on project and off project, and such related facilities for the maintenance of traffic shall be the responsibility of the Contractor.

1.5 LOCAL AND EMERGENCY TRAFFIC

A. Contractor is required and shall be solely responsible for notifying the City of Sandpoint and emergency services (911) of road closures and detour routes on a daily basis. Submit a copy to the Engineer for informational purposes only.

B. Access shall be provided to private properties at all times, unless the Contractor obtains permission from the property owner and provides it in writing to the Engineer and Owner.

C. No private driveway may be closed without the written approval of the Owner.

D. Emergency traffic such as police, fire, and disaster units shall be provided reasonable access at all times. The Contractor shall be liable for any damages which may result from Contractor's failure to provide such reasonable access.

E. In performing any work located near emergency facilities (hospitals, fire stations, police stations, etc.), Contractor shall provide unimpeded access for emergency vehicles at all times and shall coordinate with emergency services staff daily to ensure Contractor's activities will not interrupt emergency services.

1.6 PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC

A. The Contractor shall take every precaution to protect pedestrian and vehicular traffic.

B. The posting of advance warning signs, barricades, traffic cones, flashers, etc., shall be in accordance with the current edition of Part Six of the "Manual on Uniform Traffic Control Devices for Streets and Highways" prepared by the National Joint Committee of Uniform Traffic Control Devices.

1.7 FLAGGERS

A. The Contractor shall furnish, at Contractor's expense, all flagpersons, flagperson radios as needed, and appurtenances as required.

1.8 TRAFFIC CONTROL WITHIN AND ABUTTING THE PROJECT

A. The Contractor shall place and maintain all signs, barricades, and warning lights within the limits of the project on all roads and driveways entering the project so that approaching traffic is aware of the construction work before reaching the warning signs and barriers immediately abutting the project. Signs which are required shall be furnished by the Contractor.

B. Barricades shall be furnished by the Contractor. The barricades shall be of a conventional design normally used in road construction work in accordance with the MUTCD.

1.9 TRAFFIC CONTROL SIGNS

A. Standard traffic control signs required for construction shall be furnished by the Contractor. The Contractor shall maintain them in a clean condition until the need for them has ceased, after which the Contractor shall carefully remove the signs. All signs must meet reflectivity requirements as specified by ITD.

1.10 TRAFFIC CONES, DRUMS, FLARES, AND LIGHTS

A. Standard devices as approved by local jurisdictions and ITD. Flares and lights may be used during periods of low visibility to delineate traffic lanes and guide traffic.

1.11 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide the necessary barriers to protect pedestrians from dangerous portions of work (manholes, vaults, trenches, etc.).

C. Provide protection for plant life designated to remain. Replace damaged plant life at Contractor’s expense.

D. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

1.12 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified in individual specification Sections. Special attention may be required to protect concrete curbs and sidewalks from vandalism. The Contractor shall be responsible to replace any and all vandalized work.

B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to minimize damage.

1.13 ACCESS ROADS

A. Provide and maintain access, free of obstructions, to fire hydrants.

1.14 PARKING

A. Do not allow construction personnel to park in any way which may affect the access and egress of emergency vehicles. Construction personnel shall not park in a manner that prevents residents from accessing their driveway or private drives without prior approval by the Owner.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

PART 4 MEASUREMENT AND PAYMENT

4.1 Use the following unit price as designated in the Bid Schedule

A. Traffic Control: On a lump sum basis. Includes all labor, equipment, materials, and incidentals, required for temporary traffic control where required for CIPP Rehabilitation.

1. Bid Schedule Payment Reference: SP-1103.4.1.A.1.
   Bid Schedule Description: Traffic Control… lump sum (LS).

END OF SECTION

PART 8

DRAWINGS

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City of Sandpoint 2020 CIPP Project

CIPP Rehabilitation Schedule

Pipe No.	Schedule	Map No.	DS MH	US MH	Dia (in)	Length (ft)	Lateral Reinst.	Prot. Tap	Cast Iron Prot. Tap	Special Requirements:
1	Base Bid	21	EL26B08	EL26C08	8	210	4	0	0	[A], [B]
2	Base Bid	21	EL26A08	EL26B08	8	225	4	1	0	[A], [B], [G]
3	Base Bid	21	EL26A08	EL02608	8	358	8	0	2	[A], [B], [G]
4	Base Bid	21	EL30B08	EL30C08	8	360	5	0	1	[A], [B], [G]
5	Base Bid	21	EL30A08	EL30B08	8	332	4	0	0	[A], [B]
6	Base Bid	21	EL03015	EL30A08	8	322	8	0	6	[A], [B]
7	Base Bid	21	EL03215	EL32A08	8	422	4	1	0	[A], [B]
8	Base Bid	33	FR30B08	FR30C08	8	197	6	0	2	[A], [B], [F]
9	Base Bid	33	FR03010	FR30B08	8	393	6	1	0	[A], [B], [F]
10	Base Bid	33	FR24A08	FR24B08	8	232	8	0	1	[A], [B], [D]
11	Base Bid	33	FR02412	FR24A08	8	254	5	1	0	[A], [B], [D]
12	Bid Alternative	33	FR03410	FR03610	8 & 10	368	5	0	0	[A], [B], [C], [E], [I]
13	Base Bid	12/22	FR92A08	FR90B08	8	483	10	3	0	[A], [B], [G], [H]
14	Base Bid	12	FR09215	FR92A08	8	375	1	0	0	[A], [B], [H]
15	Bid Alternative	42	EL66A08	EL66A108	8	369	10	0	0	[A], [B]
16	Bid Alternative	32	BO03212	BO32A08	8	363	11	3	0	[A], [B], [G]
17	Base Bid	43	BO34F212	BO34F308	8	286	2	0	0	[A], [B], [C], [E]
18	Base Bid	43	BO34F308	BO34F408	8	307	2	1	0	[A], [B], [C]
19	Base Bid	43	BO34F408	BO34F508	8	297	3	0	0	[A], [B], [C]
TOTAL						**6,150**	**106**	**11**	**12**	

Special Requirements:

[A] End seals shall be Type ES-4 per SP-509, or approved equals.

[B] End of liner temperature monitoring required per SP-509.

[C] ITD Encroachment permit required prior to construction per SP-1103

[D] Rehabiliation shall be completed as nightwork. Temporary blockage of service only allowed between the hours of 11 pm and 8 am per specifications.

[E] Rehabilitaiton may be completed as nightwork with approval from Hotel, City and Engineer. Contractor to coordinate with Hotel and provide continuous service per specifications.

[F] Hospital service lateral enters MH FR30C08. Contractor to coordinated with the Bonner General Hospital and provide continuous service per specifications. Work may be completed as nightwork with approval from Hospital, City and Engineer.

[G] Reach contains pipe material transitions. Reference individual pipe rehabilitation schedules for specific transition locations.

[H] Pipe contains water deposits that may require extra cleaning by Contractor prior to installation

[I] Pipe diameter transitions from 8 to 10 inches. Reference individual rehabilitation schedule for transition location. CCTV video available upon request.

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	N1	N2	N3	N4	N5	N6
	MH begin:							
3.5		X		X				
4.5		X	X					
18.9	X		X					
39.4		X	X					
187.9		X	X					
*210.3		X						
	MH end:	210.3						

Pipe No.: 1

Map No.: 21

Location (street intersection): Head End at Michigan and Division

Downstream Manhole: EL26B08

Rim to Invert (ft): 5.7

Upstream Manhole: EL26C08

Rim to Invert (ft): 4.0

Diameter (in): 8

Length (ft): 210.3

No. Lateral Reinstatements: 4

No. Protruding Taps: 0

Host Pipe Material: Concrete

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

* Lateral at 210.3 ft is in Manhole

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	N1	N2	N3	N4	N5	N6
	MH begin:							
88.4		X	X					
135.7	X		X			X		
*141.5		X	X					
211.8	X		X		X			
	MH end:	225						

Pipe No.: 2

Map No.: 21

Location (street intersection): 1225 Michigan

Downstream Manhole: EL26A08

Rim to Invert (ft): 6.8

Upstream Manhole: EL26B08

Rim to Invert (ft): 5.7

Diameter (in): 8

Length (ft): 225ft

No. Lateral Reinstatements: 4

No. Protruding Taps: 1

Host Pipe Material: Concrete

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

*Lateral at 141.5ft looks like there is a second break in above the active one that is now capped.

* At 214.5ft Pipe changes to PVC 30/34

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

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City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	N1	N2	N3	N4	N5	N6
	MH begin:							
17.3		X	X					
18.6		X	X					
75	X		X		X			
108.4	X		X					
* 260.8		X	X		X			
303.3	X		X					
307.4	X		X					
311.8	X		X					
323							X	
	MH end:	358						

Pipe No.: 3

Map No.: 21

Location (street intersection): Michigan

Downstream Manhole: EL02608

Rim to Invert (ft): 6.8

Upstream Manhole: EL026A08

Rim to Invert (ft): 9.3

Diameter (in): Concrete 8"

Length (ft): 358

No. Lateral Reinstatements: 8

No. Protruding Taps: 2

Host Pipe Material: Concrete

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

* Starts with 3034 and then transitions to Concrete at 5.9 ft.

* Could not get past Lateral at 260.8 ft, TVed coming back to get footage of other Laterals.

-Protruding taps are cast iron.

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	Notes N2	Notes N3	Notes N4	Notes N5	Notes N6
	MH begin:							
117.1		X		X				
119.1	X			X				
131.8	X		X					
164.1	X		X					
167.3		X		X				
169.3	X			X				
218.0		X		X				
220.2	X		X					
268.9		X	X					
271.1	X			X				
318.2	X		X		X			
319.9		X		X				
322.1	X			X				
360.2	MH end:							

Pipe No.: 4

Map No.: 21

Location (street intersection): Garden + Divison

Downstream Manhole: EL30B08

Rim to Invert (ft): 8.7

Upstream Manhole: EL30C08

Rim to Invert (ft): 6.4

Diameter (in): 8

Length (ft): 360

No. Lateral Reinstatements: 5

No. Protruding Taps: 1

Host Pipe Material: Clay tile

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Heavy Roots in Main
Protruding tap is Cast IRON
Multiple Pipe changes from
PVC to Clay tile

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

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City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	N1	N2	N3	N4	N5	N6
FT	MH begin:							
5		X		X				
7	X			X				
59.3		X		X				
61.3	X			X				
~~71.5~~								
107.2		X		X				
109.4	X							
161.9		X		X				
163.7	X							
166.3	X		X					
209.6		X		X				
211.9	X			X				
254.6		X	X					
261.0		X		X				
263.2	X			X				
290.4	X		X					
301.8		X	X					
311.8		X		X				
314.1	X			X				
	MH end:	332ft						

Pipe No.: 5

Map No.: 21

Location (street intersection): x In Field between Division & Garden

Downstream Manhole: x EL30A08

Rim to Invert (ft): 9.0

Upstream Manhole: x EL30B08

Rim to Invert (ft): 8.7

Diameter (in): x 8 in

Length (ft): 332

No. Lateral Reinstatements: 4

No. Protruding Taps: 0

Host Pipe Material: x CIAY

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Lots of Roots

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

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City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
8		X	X		X			
26.9		X		X				
28.9	X			X				
77.6		X		X				
79.5	X			X				
111.7	X		X		X			
113		X	X		X	X		
127.7						X		
128.6		X		X				
129.2		X	X		X			
130.7	X			X				
170.6		X	X		X			
176.8		X		X				
178.9	X			X				
228.4		X		X				
230.4	X			X				
274.8	X		X		X	X		
279.5		X	X					
280.6						X		
281.5	X		X					
	MH end:	321.6						

Pipe No.: 6

Map No.: 21

Location (street intersection): Mid Block Garden St

Downstream Manhole: EL03015

Rim to Invert (ft): 10.8

Upstream Manhole: EL30A08

Rim to Invert (ft): 9.0

Diameter (in): 8

Length (ft): 321.6

No. Lateral Reinstatements: 8

No. Protruding Taps: 6

Host Pipe Material: CIAY

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

68.1 ft Start of Belly

87.2 ft End of Belly

- protruding lateral are cast iron

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	N1	N2	N3	N4	N5	N6
	MH begin:							
	EL032~~15~~							
22.4		X	X					
152.3	X		X					
283.8		X	X		X			
294.7	X		X					
355.6		X						
423.3	MH end:	EL032408						

Pipe No.: 7

Map No.: 21

Location (street intersection): Alley between Superior/Garden

Downstream Manhole: EL03215

Rim to Invert (ft): 11.3

Upstream Manhole: EL32408

Rim to Invert (ft): 4.8

Diameter (in): 8"

Length (ft): 422

No. Lateral Reinstatements: 4

No. Protruding Taps: 1

Host Pipe Material:

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Videoed up from Olive

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

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City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location		Notes					
	L	R	N1	N2	N3	N4	N5	N6
	MH begin:							
41.0	X		X					
41.5		X		X				
59.8	X		X		X			
70.1		X		X				
83.7		X	X		X			
107.7	X			X				
109.5		X		X				
130.5		X		X				
165.6		X	X					
172.5		X	X					
176.2	X		X					
196.6	MH end:							

Pipe No.: 8

Map No.: 33

Location (street intersection): 2ND + ALDER

Downstream Manhole: FR30B08

Rim to Invert (ft): 9.0

Upstream Manhole: FR30C08

Rim to Invert (ft): 7.3

Diameter (in): 8

Length (ft): 196.6

No. Lateral Reinstatements: 6

No. Protruding Taps: 2

Host Pipe Material: Clay tile

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

- Roots in mainline
- TV against flow
- Protruding taps are cast Iron
- Lateral to Bonner General Hospital comes into MH FR30C08. Contractor shall bypass service to maintain uninterrupted service throughout pipe rehabilitation and shall coordinate with hospital administrative staff for notification and scheduling.
- Maintain emergency vehicle access at all times and avoid blocking emergency vehicle access locations

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location		Notes					
	L	R	N1	N2	N3	N4	N5	N6
	MH begin:							
36.2	X			X				
80.4		X	X					
82.4	X			X				
93.0	X		X		X			
102.7	X		X					
123.7		X		X				
125.9	X			X				
157.3	X			X				
184.3		X		X				
186.0	X			X				
215.5	X			X				
240.2	X			X				
242.3		X	X					
269.3		X		X				
271.5	X			X				
273.6	X		X					
290.8		X	X					
304.8	X			X				
331.7	X			X				
333.9		X		X				
392.5	MH end:							

Pipe No.: 9

Map No.: 33

Location (street intersection): 2nd + ALDER

Downstream Manhole: FR03010

Rim to Invert (ft): 8

Upstream Manhole: FR30B08

Rim to Invert (ft): 9.0

Diameter (in): 8

Length (ft): 392.5

No. Lateral Reinstatements: 6

No. Protruding Taps: 1

Host Pipe Material: Clay tile

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
1.5	X		X					
6.4	X		X					
35.9	X		X					
48.0	X		X					
68.5		X		X				
86.8		X	X		X			
90.8	X			X				
100.3		X	X					
123.4	X		X					
133.3		X	X					
231.5	MH end:							

Pipe No.: 10

Map No.: 33

Location (street intersection): 2nd Between Cedar/Main

Downstream Manhole: FR24A08

Rim to Invert (ft): 9.3

Upstream Manhole: FR24B08

Rim to Invert (ft): 8.0

Diameter (in): 8

Length (ft): 231.5

No. Lateral Reinstatements: 8

No. Protruding Taps: 1

Host Pipe Material: Clay tile

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Protruding Lat is Cast Iron

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
66.9		X	X					
102.3		X	X					
106.3	X		X		X			
116.9	X		X					
120.9	X			X				
131.6		X	X					
162.4		X		X				
254.4	MH end:							

Pipe No.: 11

Map No.: 33

Location (street intersection): 2nd & Main

Downstream Manhole: FR02412

Rim to Invert (ft): 9

Upstream Manhole: FR24A08

Rim to Invert (ft): 9.3

Diameter (in): 8

Length (ft): 254

No. Lateral Reinstatements: 5

No. Protruding Taps: 1

Host Pipe Material: Clay tile

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin: FR03610							
77.6	X		CAP					
97.4		X	CAP					
124.7	X		CAP					
129.3		X	X					
133.7	X		CAP					
155.7		X	X ? TAP.					
177.9	X		CAP					
222.9		X	X					
234.9	X		CAP					
270.		X	X					
292.4	X		CAP					
302		X	X					
367.6	MH end: FR03410							

Pipe No.: 12

Map No.: 33

Location (street intersection): CEDAR/5th to Cedar/4th

Downstream Manhole: FR03410

Rim to Invert (ft): 10.4

Upstream Manhole: FR03610

Rim to Invert (ft): 10

Diameter (in): 8 & 10

Length (ft): 367.6

No. Lateral Reinstatements: 4-5

No. Protruding Taps: Ø

Host Pipe Material: Red tile

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
10.2	X			X				
15.7		X	X					
40.1		X		X				
67.5	X		X					
90.8		X	X					
111.5	X		X					
112						X		
119.9		X		X				
141.4		X		X				
196.8		X	X					
202.1	X		X		X			
208.3		X		X				
241.6	X			X				
251.3		X	X					
256.2	X			X	X			
261.4						X		
286.7		X		X				
293.0	X			X				
349		X	X					
364.3						X		
373.8						X		
380.1		X		X				
394.9	X		X					
455.4		X		X				
473.3		X	X		X			
	MH end:	482.6						

Pipe No.: 13

Map No.: 12/22

Location (street intersection): ST. CLAIR South of Michigan

Downstream Manhole: FR92A08

Rim to Invert (ft): 8.0

Upstream Manhole: FR90B08

Rim to Invert (ft): 7.6

Diameter (in): 8

Length (ft): 482.6

No. Lateral Reinstatements: 10

No. Protruding Taps: 3

Host Pipe Material: Concrete

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

* Water Deposite, I & I at most Joints
* At 90 ft Pipe changes to Red Clay
* At 92 ft Pipe change back to Concrete
* At 192ft Pipe changes to PVC
* At 199ft Pipe changes back to Concrete
* At 344.4ft Pipe change to PVC with Joint offset

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
68.0	X		X					
82.5		X		X				
160.9		X		X				
233.4		X		X				
374.6	MH end:							

Pipe No.: 14

Map No.: 12

Location (street intersection): St. Clair + Erie

Downstream Manhole: FR09215

Rim to Invert (ft): 11.8

Upstream Manhole: FR92A08

Rim to Invert (ft): 8.0

Diameter (in): 8

Length (ft): 374.6

No. Lateral Reinstatements: 1

No. Protruding Taps: 0

Host Pipe Material: Concrete

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Water deposites @ most Joints

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location		Notes					
	L	R	N1	N2	N3	N4	N5	N6
	MH begin:							
9.3		X	X					
14.2	X		X					
109.8		X	X					
112.7	X		X					
182.7		X	X					
187.9	X		X					
249.3		X	X					
254.5	X		X					
344.5		X	X					
347.6	X		X					
369.0	MH end:							

Pipe No.: 15

Map No.: 42

Location (street intersection): Ruth & Spruce

Downstream Manhole: EL66A08

Rim to Invert (ft): 6.6

Upstream Manhole: EL66A108

Rim to Invert (ft): 6

Diameter (in): 8

Length (ft): 369.0

No. Lateral Reinstatements: 10

No. Protruding Taps: 0

Host Pipe Material: Concrete

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
4.7		X	X		X			
52.3	X		X					
57.2		X	X					
73		X		X				
94	X			X				
109.1		X		X				
120.4	X		X		X			
130.1		X	X					
143.3	X		X					
150.9		X		X				
159.5		X	X					
195.2	X		X					
205.8		X		X				
253.1		X		X				
265.9	X			X				
271.5	X		X					
281.9	X		X		X			
299.9	X		X					
312.3		X		X				
343.3						X		
	MH end:	362.8						

Pipe No.: 16

Map No.: 32

Location (street intersection): MAIN AND Forrest

Downstream Manhole: B003212

Rim to Invert (ft): 12.7

Upstream Manhole: B032A08

Rim to Invert (ft): 10.4

Diameter (in): 8

Length (ft): 362.8

No. Lateral Reinstatements: 11

No. Protruding Taps: 3

Host Pipe Material: CLAY TILE

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Changes to PVC at 344.9

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
107	X		X					
115.8	X		X					
286'	MH end:							

Pipe No.: 17

Map No.: 43

Location (street intersection): 807 Fifth Ave

Downstream Manhole: BO34F212

Rim to Invert (ft): 7.5

Upstream Manhole: BO34F308

Rim to Invert (ft): 4.0

Diameter (in): 8

Length (ft): 286'

No. Lateral Reinstatements: 2

No. Protruding Taps: 0

Host Pipe Material: Conc.

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Roots + Grease ~~For~~ In Main Line
Main Line goes under Hotel

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location L	Service Location R	Notes N1	N2	N3	N4	N5	N6
	MH begin:							
47		X		X				
77.9		X	X		X			
167.4		X		X				
206.8			X					
211.4				X				
306.6	MH end:							

Pipe No.: 18

Map No.: 43

Location (street intersection): 907 N 5th

Downstream Manhole: BO34F308

Rim to Invert (ft): 4.0

Upstream Manhole: BO34F408

Rim to Invert (ft): 6.0

Diameter (in): 8

Length (ft): 306.6

No. Lateral Reinstatements: 2

No. Protruding Taps: 1

Host Pipe Material: Conc.

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint 2020 CIPP Project

SANDPOINT

J-U-B ENGINEERS, INC.

Pipe Rehabilitation Schedule

Distance	Service Location		Notes					
	L	R	N1	N2	N3	N4	N5	N6
	MH begin:							
7.5		X	X					
56.4		X		X				
110.7		X	X					
231.4		X	X					
297.3	MH end:							

Pipe No.: 19

Map No.: 43

Location (street intersection): Head end Just North of 921 5th

Downstream Manhole: BO34F408

Rim to Invert (ft): 6

Upstream Manhole: BO34F508

Rim to Invert (ft): 4.16

Diameter (in): 8

Length (ft): 297.3

No. Lateral Reinstatements: 3

No. Protruding Taps: 0

Host Pipe Material: Conc.

Notes:

N1 - Reinstate service lateral

N2 - Abandoned service; do not reinstate

N3 - Cut off protruding lateral

N4 - Cracked or damaged pipe; exercise caution during cleaning to prevent further damage

N5 - Line through manhole

N6 - Point repair to be completed by City prior to CIPP installation

Special Notes:

Installation Record

Date of Installation:	Date of Final Inspection:	Date of End Sealing:	Liner Design Thickness (mm):

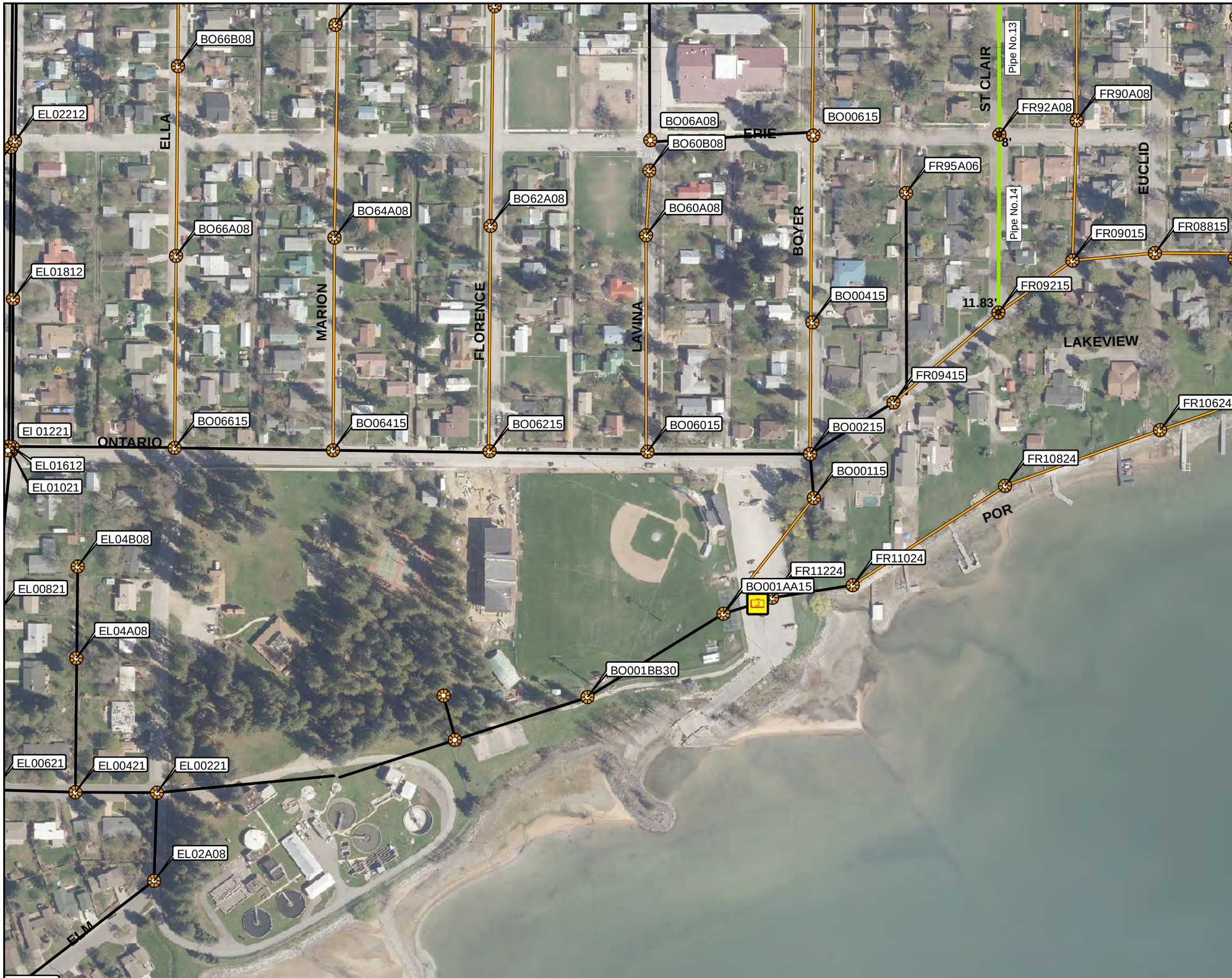
No. Lateral Reinstatements:	No. Protruding Taps:	Pressure Test (pass/fail):

Contractor Representative: _____ Date: _____

City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 12



Notes

0 55 110 220
Feet

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

N

Notes:

This vicinity map is provided for location reference only.

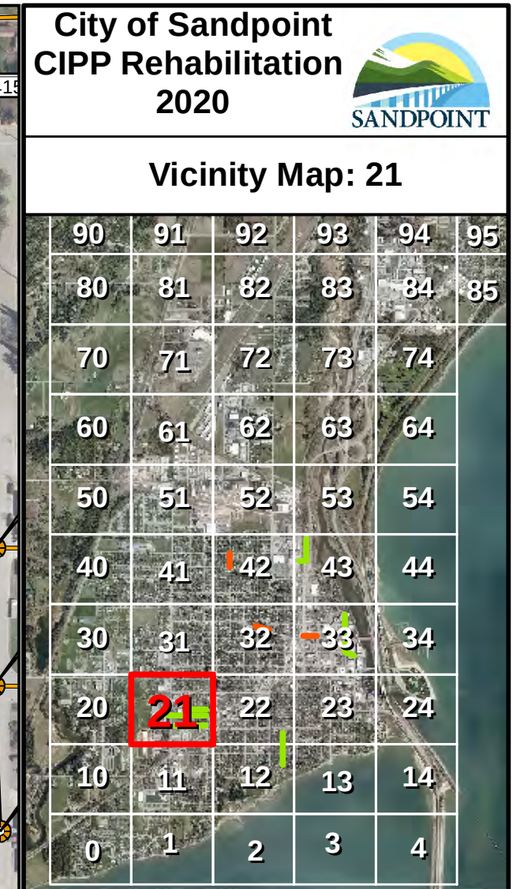
Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407

City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 21



0 55 110 220
Feet

Notes

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

Notes:

This vicinity map is provided for location reference only.

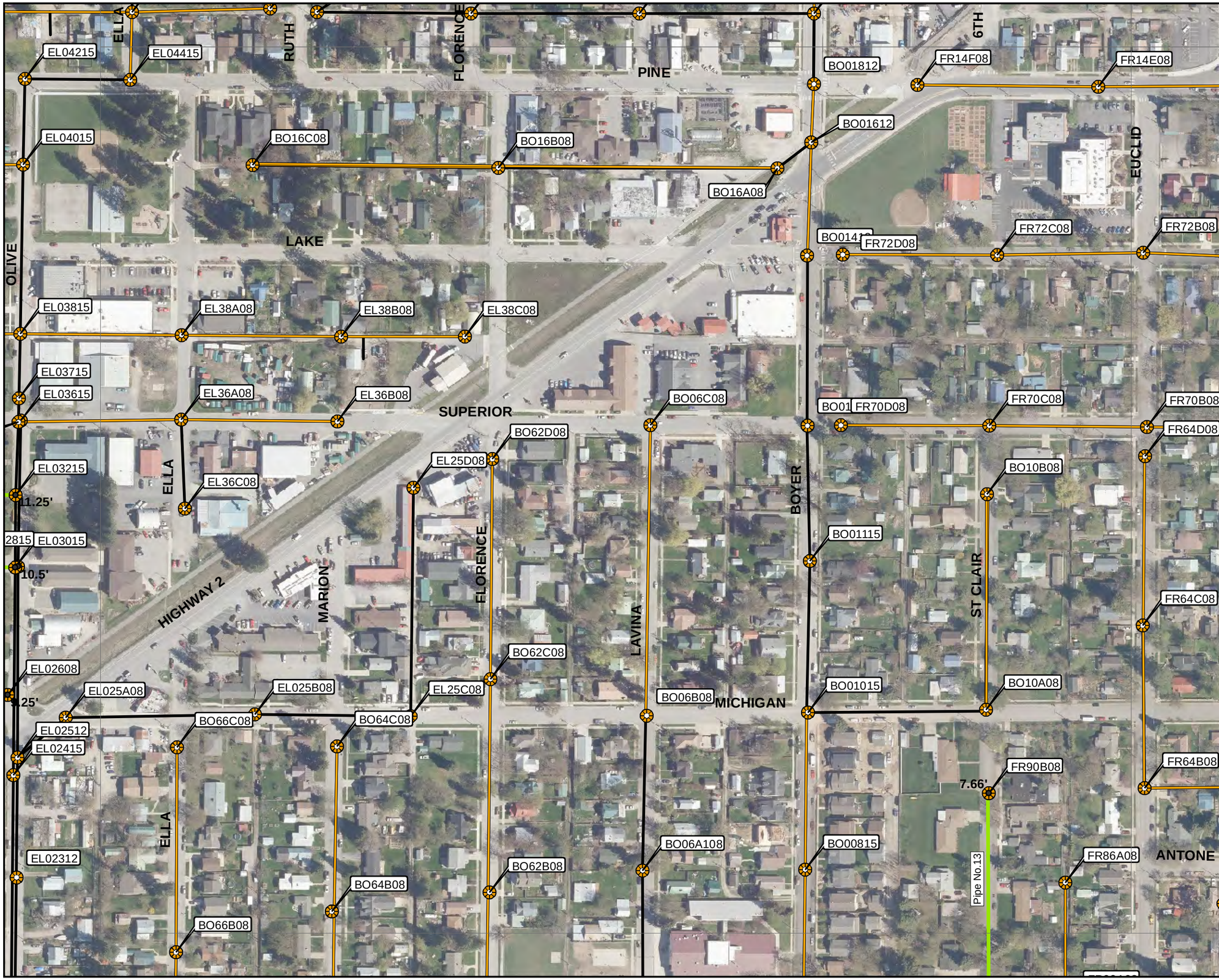
Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407

City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 22



90	91	92	93	94	95
80	81	82	83	84	85
70	71	72	73	74	
60	61	62	63	64	
50	51	52	53	54	
40	41	42	43	44	
30	31	32	33	34	
20	21	22	23	24	
10	11	12	13	14	
0	1	2	3	4	

0 55 110 220
Feet

Notes

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

Notes:

This vicinity map is provided for location reference only.

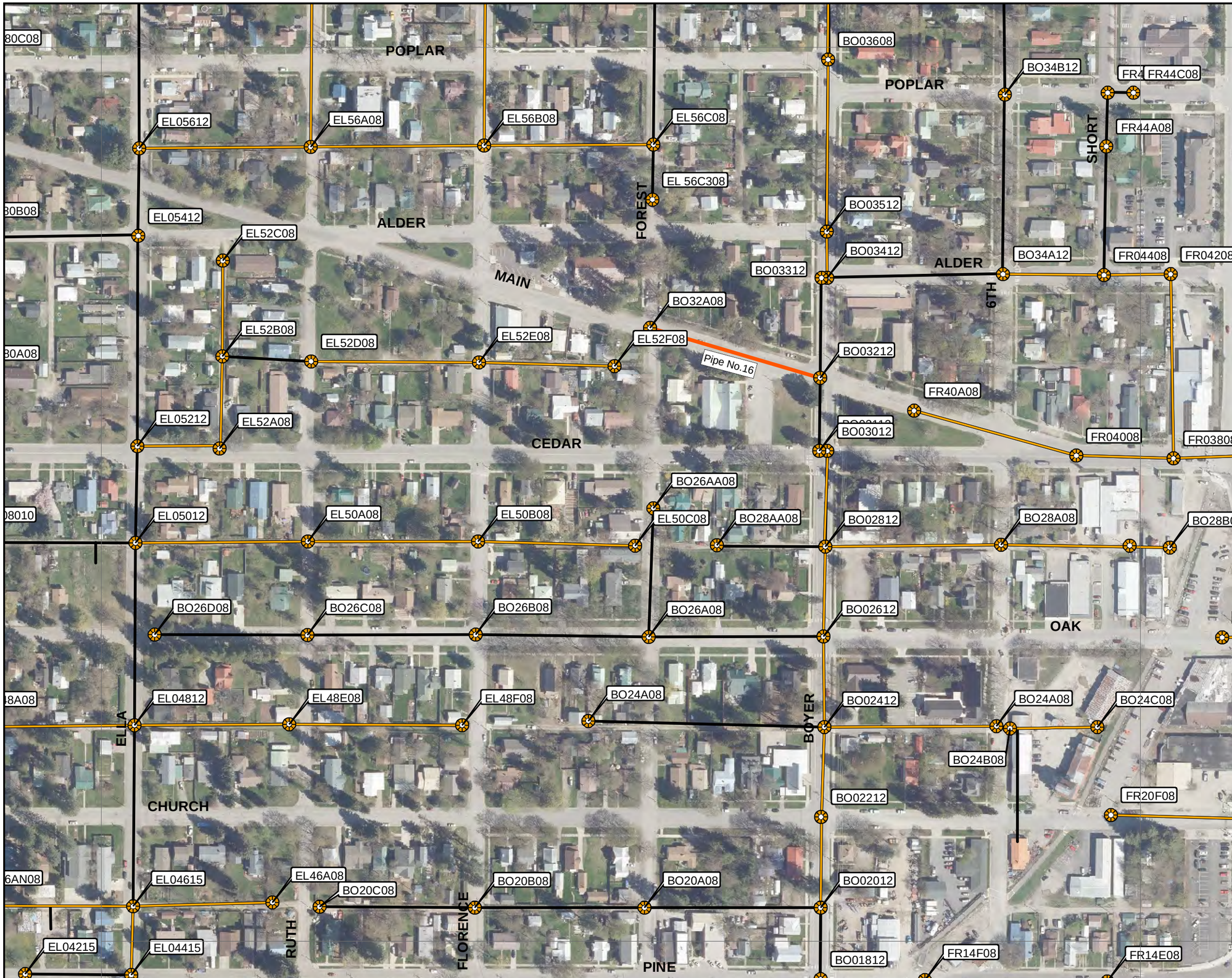
Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407

City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 32



0 55 110 220
Feet

Notes

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

N

Notes:

This vicinity map is provided for location reference only.

Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407

City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 33

Notes

0 55 110 220
Feet

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

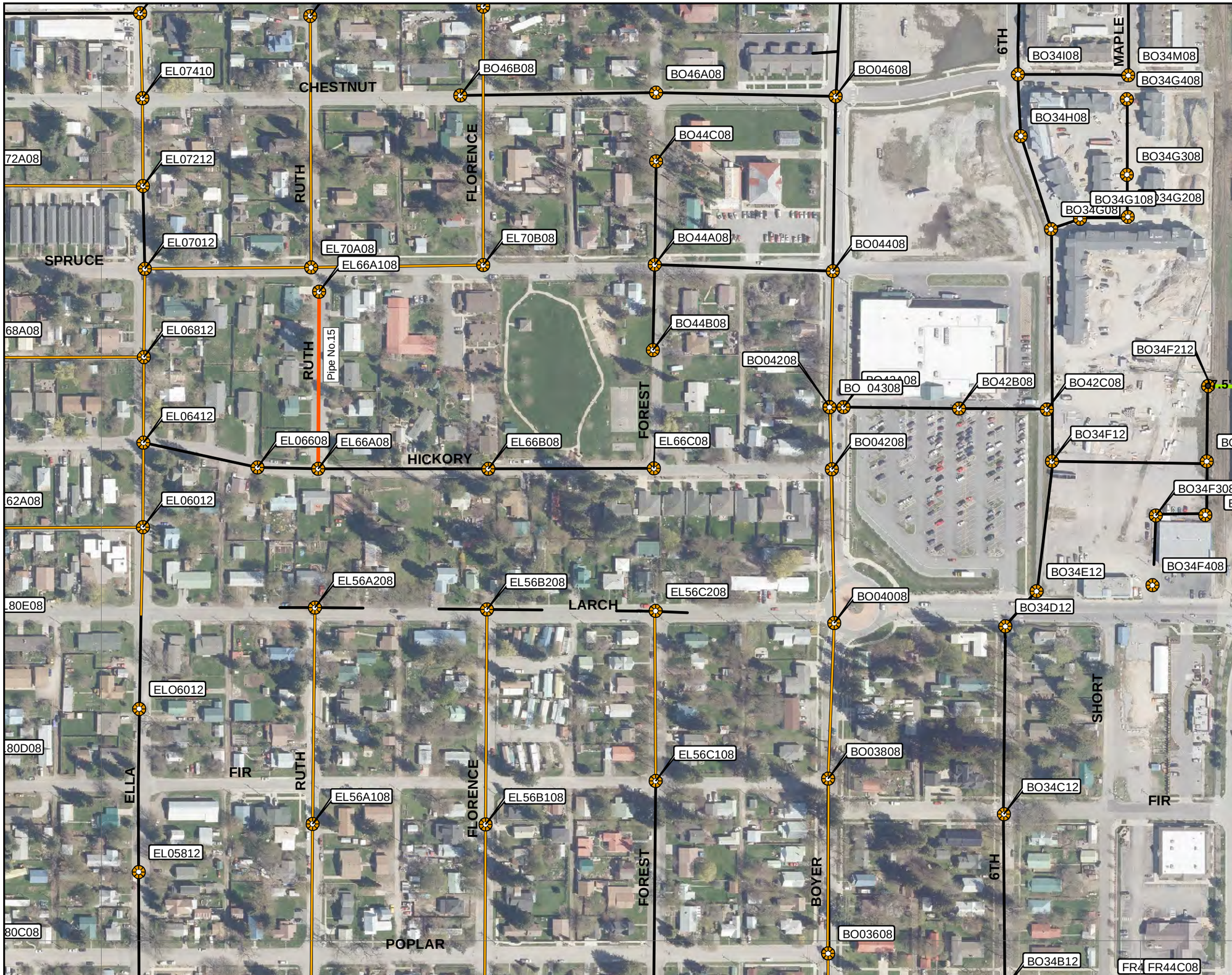
N

Notes:

This vicinity map is provided for location reference only.

Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407



City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 42

90	91	92	93	94	95
80	81	82	83	84	85
70	71	72	73	74	
60	61	62	63	64	
50	51	52	53	54	
40	41	42	43	44	
30	31	32	33	34	
20	21	22	23	24	
10	11	12	13	14	
0	1	2	3	4	

Notes

0 55 110 220
Feet

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

N

Notes:

This vicinity map is provided for location reference only.

Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407

City of Sandpoint CIPP Rehabilitation 2020

SANDPOINT

Vicinity Map: 43

0 55 110 220
Feet

Notes

- Bid Alternative
- Base Bid
- Existing CIPP Sewer Line
- Sewer Line
- Sewer Manhole

N

Notes:

This vicinity map is provided for location reference only.

Refer to specific schedules for work requirements.

City of Sandpoint
Infrastructure and Development Services
1123 Lake Street
Sandpoint, ID 83864
208-263-3407