

CONTRACT DOCUMENTS



CITY OF
CHILOQUIN

MERCANTILE BUILDING DEBRIS PILE REMOVAL

2023

Project funded in part by:
Oregon Business Development Department – Infrastructure Finance Authority –
Brownfields Redevelopment Fund Grant



1435 Esplanade Ave, Klamath Falls, OR 97601
o 541.884.4666 / f 541.884.5335 / w AdkinsEngineering.com

CONTRACT DOCUMENTS
FOR
CITY OF CHILOQUIN, OREGON
MERCANTILE BUILDING DEBRIS PILE REMOVAL
2023



EXPIRES 6/30/24

The City of Chiloquin has reviewed these Bidding Documents and approved them for bidding the project.

Gaylon Hancock Mayor Pro-TEM
Signature and Title

9-12-23
Date

PROJECT FUNDED BY: Work under this Contract will be funded in part with
Oregon Business Development Department – Infrastructure Finance Authority –
Brownfields Redevelopment Fund Grant

ADKINS ENGINEERING & SURVEYING
Civil Engineers
Klamath Falls, Oregon

TABLE OF CONTENTS

Contract Documents

BIDDER'S PACKET (BOUND SEPARATELY)

BIDDING REQUIREMENTS

Advertisement for Bids
Instructions to Bidders

AGREEMENT

Agreement Between Owner and Contractor

CONTRACT FORMS

Notice of Intent to Award Contract
Notice of Award
Performance Bond
Payment Bond
Notice to Proceed
Application for Payment
Work Change Directive
Field Order
Change Order
Certificate of Substantial Completion
Notice of Acceptability of Work

WAGE REQUIREMENTS

OR State - BOLI

CONDITIONS OF THE CONTRACT

Standard General Conditions
Supplementary Conditions

APPENDICES

Asbestos Disposal Procedures

SPECIFICATIONS

Asbestos Abatement Specification

ADVERTISEMENT FOR BIDS

The City of Chiloquin is requesting sealed Bids for the following Project:

Mercantile Building Debris Pile Removal

Bids for the Project will be received at the Chiloquin City Hall located at 127 South 1st Street, Chiloquin, Oregon, 97624, until **October 19, 2023** at **2 PM** local time. At that time, the Bids received will be publicly opened and read.

The Project will include but not limited to:

Remove and transport a lump sum amount of 350 CY for disposal, of an asbestos-contaminated material (ACM) debris pile, and section of the remaining wall as ACM, of the former Markwardt Brothers Garage site located at West Chocktoot Street and North 1st Avenue in Chiloquin, Oregon. With the quantity of any contingency volume billed out as a unit price up to but not to exceed 100 CY.

The Project has an expected duration of **60 days** from issuance of Notice to Proceed.

The digital Bidding Documents may be downloaded for a non-refundable payment of \$25.00 by inputting QuestCDN eBidDoc Number **8637139** on the website. Assistance with free QuestCDN membership registration, document downloading, and working with the digital Project information may be obtained at QuestCDN.com, at 952-233-1632, or via e-mail at info@questcdn.com. Contractor must be listed on QuestCDN's Plan Holders List to be qualified to Bid. The Bidding Documents will be available for download **EOB September 19, 2023**. No paper sets will be provided for bidding purposes.

The Issuing Office for the Bidding Documents is:

Adkins Engineering & Surveying
1435 Esplanade Avenue, Klamath Falls, Oregon 97603
541-884-4666, Dan Scalas, P.E. Project Manager

Prospective Bidders may examine the Bidding Documents at the Issuing Office Monday through Friday between the hours of **8:00 a.m. and 5:00 p.m.**

Bidding Documents may also be examined at the following locations:

City of Chiloquin, 127 South 1st. Street, Chiloquin, Oregon
Klamath Builders Exchange, 724 Main Street, Klamath Falls, Oregon

And online at:

Medford Builders Exchange, 701 Jackson Street, Medford, Oregon
Premier Builders Exchange, 1902 NE 4th Street, Bend, Oregon

A non-mandatory pre-bid conference will be held at **10 AM** local time, on **October 4, 2023**, at **Chiloquin City Hall**. Bidders are highly encouraged to attend.

This Project is being funded in part through the Oregon Business Development Department – Infrastructure Finance Authority – Brownfields Redevelopment Fund Grant.

The Contractor will be subject to the applicable provisions of ORS 279C.800 through ORS 279C.870 (the Oregon Prevailing Wage Law).

Bid security shall be furnished in accordance with the Instructions to Bidders.

Bidder must be licensed in accordance with the Oregon Construction Contractor's Board rules and regulations and have an asbestos abatement license.

The Owner is an equal opportunity employer. Minority and women-owned businesses are encouraged to bid.

Owner: **City of Chiloquin**

INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACT

TABLE OF CONTENTS

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

ARTICLE 1—DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

- A. *Issuing Office*—The office from which the Contract Documents are to be issued.
- B. *Owner* — City of Chiloquin

ARTICLE 2—CONTRACT DOCUMENTS

2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Contract Documents) via download from QuestCDN as stated in the Advertisement for Bids. See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.

2.02 Contract Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Contract Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.

Bidder must obtain Contract Documents via download from QuestCDN as stated in the Advertisement for Bids.

2.03 Owner has established a Bidding Documents Website (QuestCDN) as indicated in the Advertisement or invitation to bid. Owner requires that Bidder register as a plan holder with the Issuing Office at QuestCDN and obtain a complete set of the Contract Documents from QuestCDN. Bidders may rely on those sets of Contract Documents obtained from the Bidding Documents Website as complete, unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner via QuestCDN.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within [5] days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications

such as financial data, previous experience, and present commitments, and (b) such other data as may be necessary to determine the Bidder's qualifications.

- 3.02 Bidder must be listed on QuestCDN's Plan Holders List.
- 3.03 Bidder must have a current license issued by the Oregon Construction Contractors Board and possess an appropriate endorsement as per ORS Chapter 701.021(1).
- 3.04 Bidder must be listed as an Asbestos Abatement Contractor with the State of Oregon Department of Environmental Quality.
- 3.05 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.06 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.
- 3.07 Investigation of Bidder's qualifications shall be as per ORS Chapter 279C.375.

ARTICLE 4—PRE-BID CONFERENCE

- 4.01 A non-mandatory pre-bid conference will be held at the time and location indicated in the Advertisement or invitation to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference; however, attendance at this conference is not required to submit a Bid.
- 4.02 Information presented at the pre-Bid conference does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the pre-Bid conference. Information presented, and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.
- 4.03 Any discrepancies of design Work the Contractor believes do not meet code or will not function as intended shall be reported to the Engineer in writing prior to the Bid.

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

- 5.01 Site and Other Areas
 - A. The Site is identified in the Contract Documents. By definition the Site includes rights-of-way, easements, and other lands furnished by the Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.
- 5.02 Existing Site Conditions
 - 1. The Specifications identify the following regarding existing conditions at or adjacent to the Site:

- a. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data.
 - b. Those drawings known to Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data.
 - c. Reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
2. Reports and drawings referenced above are found in the Appendices. The Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Specifications. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

5.03 Site Visit and Testing by Bidders

- A. Bidder is required to visit the Site and conduct a thorough visual examination of the Site and adjacent areas. During the visit the Bidder must not disturb any ongoing operations at the Site.
- B. A Site visit is scheduled following the pre-bid conference.
- C. A Site visit is scheduled for **October 4, 2023, after Pre-bid meeting scheduled for 10 a.m. at 127 So. 1st Street, Chiloquin, Oregon.**
- D. Bidders visiting the Site are required to arrange their own transportation to the Site.
- E. Bidder must conduct the required Site visit during normal working hours.
- F. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- G. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site. Bidder is responsible for establishing access needed to reach specific selected test sites.
- H. Bidder must comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- I. Bidder must fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

5.04 Owner's Safety Program

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

5.05 Other Work at the Site

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

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 Express Representations and Certifications in Bid Form, Agreement

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

ARTICLE 7—INTERPRETATIONS AND ADDENDA

7.01 Bidder shall submit all questions about the meaning or intent of the Contract Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:

- A. Email Dan Scalas, P.E. dscalas@adkinsengineering.com and Vickie Ream vream@adkinsengineering.com no later than **10 days** prior to the date for opening of Bids.

7.02 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders via QuestCDN. Questions received less than **10 days** prior to the date for opening of Bids may not be answered.

7.03 Written Addenda to the Contract Documents which, if issued, shall be uploaded to the QuestCDN website and made digitally available to all prospective Bidders listed on QuestCDN's Plan Holders List. E-mail notification shall be sent to all prospective Bidders who have acquired digital Contract Documents at the respective e-mail addresses furnished for such purposes. Written Addenda shall be made digitally available not later than **6 days** prior to the date fixed for the opening of Bids. Failure of any Bidder to receive any such Addenda shall not relieve such Bidder from any obligation under the Bid as submitted. All Addenda so issued shall become part of the Contract

Documents. It is the responsibility for all prospective Bidders to check the website prior to submitting his Bid to verify whether or not any Addenda have been issued for the Project.

- 7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8—BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **5 percent** of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of an irrevocable letter of credit issued by an insured institution as defined in ORS 706.008 or a cashier's or certified check, or a Bid bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions. Such Bid bond will be issued in the form included in the Contract Documents.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, furnished the required Contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Contract security within 10 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited, in whole in the case of a penal sum bid bond, and to the extent of Owner's damages in the case of a damages-form bond. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

ARTICLE 9—CONTRACT TIMES

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

ARTICLE 10—SUBSTITUTE AND "OR EQUAL" ITEMS

- 10.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Contract Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows

the Contractor to request that Engineer authorize the use of a substitute or “or-equal” item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.

- 10.02 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Contract Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.
- 10.03 If an award is made, Contractor shall be allowed to submit proposed substitutes and “or-equals” in accordance with the General Conditions.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 11.01 A Bidder must be prepared to retain specific Subcontractors and Suppliers for the performance of the Work if required to do so by the Contract Documents or in the Specifications. If a prospective Bidder objects to retaining any such Subcontractor or Supplier and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 11.02 The apparent Successful Bidder, and any other Bidder so requested, shall within two hours after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for the Work as stated on the First-Tier Subcontractor Disclosure Form and as defined in ORS 279C.370.
- 11.03 If requested by Owner, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor or Supplier. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- 11.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor or Supplier, so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.07 of the General Conditions.
- 11.05 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SC 7.07A.

ARTICLE 12—PREPARATION OF BID

- 12.01 The Bid Form is included with the Contract Documents and is included in the Bidder's Packet.
- A. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must be indicated for each section, bid item, alternate, adjustment unit price item, and unit price item listed therein.
- 12.02 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature) accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.
- 12.03 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature) accompanied by evidence of authority to sign. The official address of the partnership must be shown.
- 12.04 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.
- 12.05 A Bid by an individual must show the Bidder's name and official address.
- 12.06 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.
- 12.07 All names must be printed in ink below the signatures.
- 12.08 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 12.09 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.
- 12.10 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid. If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure. Bidder's state contractor license number must also be shown on the Bid Form.
- 12.11 If Project is funded in part by Federal funds, then Contractor must show their DUNS Number on the Bid Form.

ARTICLE 13—BASIS OF BID

- 13.01 Lump Sum
- A. Bidders must submit a Bid on a lump sum basis as set forth in the Bid Form.

13.02 Base Bid with Alternates

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

13.03 Unit Price

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

ARTICLE 14—SUBMITTAL OF BID

- 14.01 With each copy of the Contract Documents, a Bidder is furnished with a section labeled "Bidder's Packet," which includes a copy of the Bid Form, the Bid Bond Form, and other required documents. All documents in the Bidder's Packet shall be printed if not provided in hard copy form. The Bidder's Packet shall be completed in its entirety and submitted to the Owner as the Contractor's Bid.
- 14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and must be enclosed in a plainly marked sealed package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, Owners name and address, date and time of Bid opening, the name and address of Bidder, Bidder's CCB license number, and must be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid must be enclosed in a separate package plainly marked on the outside with the

notation "BID ENCLOSED." A mailed Bid must be addressed to Teresa Foreman, City of Chiloquin, P.O. Box 196 / 127 S 1st Street, Chiloquin, Oregon 97624.

- 14.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 15—MODIFICATION AND WITHDRAWAL OF BID

- 15.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.

ARTICLE 16—OPENING OF BIDS

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

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

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

ARTICLE 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

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

of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.

18.04 If Owner awards the contract for the Work, such award will be to the responsible Bidder submitting the lowest responsive Bid.

18.05 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

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

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

A Responsible Bidder is a Bidder who, in the Owner's opinion, meets the standards of responsibility as defined in ORS 279.C.375(3).

18.07 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers. Such investigation shall be pursuant to ORS Chapter 279C.375.

ARTICLE 19—BONDS AND INSURANCE

19.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds, other required bonds (if any), and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by required bonds and insurance documentation.

19.02 Article 8, Bid Security, of these Instructions, addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

20.01 When Owner issues a Notice of Award to the Successful Bidder, it will be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 10 days thereafter, Successful Bidder must execute and deliver the required number of counterparts of the Agreement and any bonds and insurance documentation required to be delivered by the Contract Documents to Owner. Owner will deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and

electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 21—ADDITIONAL REQUIREMENTS OF THE BID

21.01 Disclosure of First-Tier Subcontractors

A. Oregon law requires Bidders to disclose information about certain first-tier Subcontractors who will be furnishing labor or labor and materials when the Contract value for a Public Improvement is greater than \$100,000 (see ORS 279C.370). Specifically, when the Contract amount of a first-tier Subcontractor is greater than or equal to: (i) 5 percent of the Project Bid, but at least \$15,000, or (ii) \$350,000 regardless of the percentage, you must disclose the following information about that Subcontractor within two (2) hours of Bid closing:

1. The Subcontractor's name and address.
2. The Subcontractor's type of work being performed.
3. The dollar amount of the Subcontractor's work to be performed.
4. The Subcontractor's Construction Contractors License number.

If no Subcontractors that are subject to the above disclosure requirements are anticipated, a Bidder shall so indicate "NONE" on the accompanying form.

B. THE OWNER MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE. OAR 137-049-0360.

C. To determine disclosure requirements, the Owner recommends that you disclose subcontract information for any Subcontractor as follows:

1. Determine the lowest possible Contract price. That will be the base Bid amount less all deductive alternate Bid amounts (exclusive of any options that can only be exercised after Contract award), if any.
2. Provide the required disclosure information for any first-tier Subcontractor whose potential labor or labor and materials Contract services (Subcontractor base Bid amount plus all additive alternate Bid amounts, exclusive of any options that can only be exercised after Contract award, if any) are greater than or equal to:
 - a. 5 percent of that lowest Contract price, but at least \$15,000, or
 - b. \$350,000 regardless of the percentage.
3. Total all possible work for each Subcontractor in making this determination (e.g., if a Subcontractor will provide \$15,000 worth of services on the base Bid and \$40,000 on an additive alternate, then the potential amount of Subcontractor's services is \$55,000. Assuming that \$55,000 exceeds 5 percent of the lowest Contract price, provide the disclosure for both the \$15,000 services and the \$40,000 services).

- D. SUBMISSION. A Bidder shall submit the disclosure form included in the Bidder's Packet within two (2) working hours after Bid closing. See instructions on the form.
 - E. RESPONSIVENESS. Compliance with the disclosure and submittal requirements of ORS 279C.370 and this rule is a matter of Responsiveness. Bids which are submitted by Bid Closing, but for which the disclosure submittal has not been made by the specified deadline, are not Responsive and shall not be considered for Contract award. It shall be the Bidder's sole responsibility to ensure the Disclosure Form is delivered to the Owner within the required two (2) working hours. Failure, for any reason, of the Owner to receive this form from the Bidder will be the total responsibility of the Bidder. The Owner will assume no responsibility or liability for the failure of the Owner's fax equipment or any other problem resulting in failure of the Disclosure Form to be received.
- 21.02 At least seven days before award of the Contract, the Owner may issue to each Bidder a Notice of Intent to Award in the form set forth in the Contract Documents. Said notice shall state the Bidder to whom Owner intends to award the Contract. Any protest of award must be filed with the Owner within seven (7) days of mailing of the Notice of Intent to Award. Protests shall be filed in writing to the person and place where Bids were received. All protests must be accompanied by sufficient documentation identifying the grounds and evidence on which the protest is based. The Owner will have a minimum of seven days in which to review the protest and supporting information. Owner's decision on the validity of the protest shall be determined final.
- 21.03 Pursuant to ORS 279A.120, in determining the lowest responsible Bidder, the Owner, for the purpose of awarding a Contract, shall add a percent increase in the Bid of each non-resident Bidder equal to the percent, if any, of the preference given to that Bidder in the state in which that Bidder resides.
- 21.04 Oregon law requires anyone who is engaged for compensation in construction activities to be registered with the State of Oregon Construction Contractors Board in accordance with ORS 701. Registration is required for any individual or business entity which advertises, offers, Bids, or arranges to do, or actually does any construction, alteration, remodeling, or repair involving residential, commercial, industrial, or public works improvements. This includes partnerships, corporations, and self-employed individuals, whether working by the hour, week, job, or "cost-plus," whether by written contract or oral agreement.
- 21.05 Bidder shall comply with all prevailing wage rates applicable to this Work.

ARTICLE 22—WAGE RATE REQUIREMENTS

- 22.01 This Project is subject to the following wage rate requirements as outlined in the Supplementary Conditions, Articles 19.
- A. Oregon Prevailing Wage Rate Law

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between City of Chiloquin ("Owner") and [name of contracting entity] ("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 Project infrastructure will include but not limited to:

Remove and transport a lump sum amount of 350 CY for disposal, of an asbestos-contaminated material (ACM) debris pile, and section of the remaining wall as ACM, of the former Markwardt Brothers Garage site located at West Chocktoot Street and North 1st Avenue in Chiloquin, Oregon. With the quantity of any contingency volume billed out as a unit price up to but not to exceed 100 CY.

ARTICLE 2—THE PROJECT

- 2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows:

Mercantile Building Debris Pile Removal

ARTICLE 3—ENGINEER

- 3.01 The Owner has retained Adkins Engineering & Surveying, Inc. to act as Owner's Authorized Representative, OAR, assume all duties and responsibilities of OAR, and have the rights and authority assigned to OAR in the Contract.
- 3.02 The Owner has retained Anderson Engineering as Engineer of Record, EOR. The part of the Project that pertains to the Work has been designed by Anderson Engineering & Surveying.

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. The Work will be substantially complete within **45** days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **60** days after the date when the Contract Times commence to run.

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. 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 **\$300** 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 **\$300** for each day that expires after such time until the Work is completed and ready for final payment.
 - 3. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.
- 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.

4.04 *Special Damages*

- A. Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for -Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.
- C. The special damages imposed in this paragraph are supplemental to any liquidated damages for delayed completion established 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 other than Unit Price Work, a lump sum of **\$[number]**.

All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.

- B. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).

| Unit Price Work | | | | | |
|---|-------------|------|--------------------|------------|----------------|
| Item No. | Description | Unit | Estimated Quantity | Unit Price | Extended Price |
| | | | | \$ | \$ |
| | | | | \$ | \$ |
| | | | | \$ | \$ |
| | | | | \$ | \$ |
| | | | | \$ | \$ |
| Total of all Extended Prices for Unit Price Work (subject to final adjustment based on actual quantities) | | | | | \$ |

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

- C. Total of Lump Sum Amount and Unit Price Work (subject to final Unit Price adjustment) \$[number].
- D. For all Work, at the prices stated in Contractor's Bid, Article 3-Basis of 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 first Monday 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

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 of the entire construction to be provided under the construction Contract Documents, Owner shall pay an amount sufficient to increase total payments to Contractor to **95** percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less **200** percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

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

6.04 6.05 *Interest*

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

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

- A. The Contract Documents consist of all of the following:
1. This Agreement.
 2. Bonds: (not attached but incorporated by reference)
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 3. General Conditions. (not attached but incorporated by reference)
 4. Supplementary Conditions. (not attached but incorporated by reference)
 5. Specifications as listed in the table of contents of the project manual. (not attached but incorporated by reference)
 6. Drawings (not attached but incorporated by reference).
 7. Addenda (numbers **[number]** to **[number]**, inclusive).
 8. Exhibits to this Agreement (enumerated as follows):
 - a. **Contractors Bid Form Article 3 Basis of Bid**
 9. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice of Intent to Award.
 - b. Notice of Award.
 - c. Notice to Proceed.

- d. Change Orders.
 - e. Contractor's Notice of Substantial Completion.
 - f. Certificate of Substantial Completion.
 - g. Contractor's Completion Certificate.
 - h. Notice of Acceptability.
- 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, if any, at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

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

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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

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

Owner:

City of Chiloquin

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name: **Julie Bettles**

(typed or printed)

Title: **Mayor**

(typed or printed)

Attest:

(individual's signature)

Title:

(typed or printed)

Address for giving notices:

City of Chiloquin

PO Box 196

Chiloquin, OR 9764

Designated Representative:

Name:

(typed or printed)

Title:

(typed or printed)

Address:

Phone:

Email:

Contractor:

(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:

License No.:

(where applicable)

State:

**NOTICE OF INTENT TO AWARD CONTRACT
ORS 279C-410(7)**

TO: **All Bidders for the Project Listed Below**

DATE OF NOTICE: _____

PROJECT NAME: **Mercantile Building Debris Pile Removal**

NOTICE IS HEREBY GIVEN that the **City of Chiloquin, Chiloquin, Oregon** (OWNER) intends to award the above-described Contract to the following apparent low bidder:

(Name of Bidder)

(Street or P.O. Box)

(City and State)

NOTICE IS FURTHER GIVEN that any protest of the OWNER'S Notice of Intent to Award Contract must be filed with **City of Chiloquin, PO Box 196 / 127 So. 1st. Street, Chiloquin, Oregon 97624** (OWNER) on or before seven calendar days from the date of this Notice. Protests must be in writing stating the basis of the protest in detail as provided by Oregon Law and be physically received at the above address on or before said date.

If no protest is filed on or prior to said date, the OWNER will thereafter award the above-described contract to the Bidder named above by issuance of a Notice of Award of Contract to said Bidder.

Dated this _____ day of _____, 20__.

City of Chiloquin

By _____
Julie Bettles
Mayor

NOTICE OF AWARD

Date of Issuance:

Owner: **City of Chiloquin**

Owner's Project No.:

Engineer: **Adkins Engineering & Surveying, Inc.**

Engineer's Project **1011-83**

Project: **Mercantile Building Debris Pile Removal**

Bidder:

Bidder's Address:

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

Remove and transport a lump sum amount of 350 CY for disposal, of an asbestos-contaminated material (ACM) debris pile, and section of the remaining wall as ACM, of the former Markwardt Brothers Garage site located at West Chocktoot Street and North 1st Avenue in Chiloquin, Oregon. With the quantity of any contingency volume billed out as a unit price up to but not to exceed 100 CY. The

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

One copy of the unexecuted counterpart of the Agreement accompanies this Notice of Award, and one copy of the Performance and Payment Bonds accompanies this Notice of Award.

You must comply with the following conditions precedent within **10 days** of the date of receipt of this Notice of Award:

1. Deliver to Owner **1** counterpart of the Agreement, signed by Bidder (as Contractor).
2. Deliver with the signed Agreement(s) the Contract security (such as required performance and payment bonds attached) and insurance documentation, as specified in the in the General Conditions, Articles 2 and 6.
3. Statutory Public Works Bond: The Contractor and applicable Subcontractors must file a Public Works Bond with the Construction Contractor's Board in accordance with Oregon Laws 2005, Chapter 360, Section 2. Verification that this bond has been filed by the Contractor must be submitted to the Engineer.
4. Other conditions precedent (if any): **[Describe other conditions that require Successful Bidder's compliance]**

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

Within 20 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: City of Chiloquin

By *(signature)*: _____

Name *(printed)*: Julie Bettles

Title: Mayor

Notice of Acceptance:

Contractor: _____

By *(signature)*: _____

Name *(printed)*: _____

Title: _____

Copy: Engineer

PERFORMANCE BOND

| | |
|--|---|
| Contractor Name: _____ Address <i>(principal place of business)</i> : [Address of Contractor's principal place of business] | Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business] |
| Owner Name: City of Chiloquin Mailing address <i>(principal place of business)</i> : City of Chiloquin PO Box 196 / 127 South 1st Street Chiloquin | Contract Description <i>(name and location)</i> : Mercantile Building Debris Pile Removal, West Chocktoot Street and North 1st Avenue, Chiloquin, OR Contract Price: [Amount from Contract] Effective Date of Contract: [Date from Contract] |
| Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16 | |
| Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative. | |
| Contractor as Principal | Surety |
| _____ <i>(Full formal name of Contractor)</i> | _____ <i>(Full formal name of Surety) (corporate seal)</i> |
| By: _____ <div style="text-align: center;"><i>(Signature)</i></div> | By: _____ <div style="text-align: center;"><i>(Signature)(Attach Power of Attorney)</i></div> |
| Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> | Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> |
| Title: _____ | Title: _____ |
| Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div> | Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div> |
| Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> | Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> |
| Title: _____ | Title: _____ |
| <i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i> | |

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

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

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

14. Definitions

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

PAYMENT BOND

| | |
|--|---|
| Contractor Name: [Full formal name of Contractor] Address <i>(principal place of business)</i> : [Address of Contractor's principal place of business] | Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business] |
| Owner Name: City of Chiloquin Mailing address <i>(principal place of business)</i> : City of Chiloquin PO Box 196 / 127 So. 1st Street Chiloquin, OR 97624 | Contract Description <i>(name and location)</i> : Mercantile Building Debris Pile Removal, West Chocktoot Street and North 1st Avenue, Chiloquin, OR Contract Price: [Amount, from Contract] Effective Date of Contract: [Date, from Contract] |
| Bond Bond Amount: [Amount] Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18 | |
| Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative. | |
| Contractor as Principal | Surety |
| <i>(Full formal name of Contractor)</i> | <i>(Full formal name of Surety) (corporate seal)</i> |
| By: _____ <div style="text-align: center;"><i>(Signature)</i></div> | By: _____ <div style="text-align: center;"><i>(Signature)(Attach Power of Attorney)</i></div> |
| Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> | Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> |
| Title: _____ | Title: _____ |
| Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div> | Attest: _____ <div style="text-align: center;"><i>(Signature)</i></div> |
| Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> | Name: _____ <div style="text-align: center;"><i>(Printed or typed)</i></div> |
| Title: _____ | Title: _____ |
| <i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i> | |

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

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

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

NOTICE TO PROCEED

Owner: City of Chiloquin Owner's Project No.: _____
Engineer: Adkins Engineering & Surveying, Inc. Engineer's Project No.: 1011-83
Contractor: _____ Contractor's Project No.: _____
Project: Mercantile Building Debris Pile Removal
Effective Date of Contract: _____

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on the date construction first commences on the Project Site or _____, whichever occurs first, pursuant to Paragraph 4.01 of the General Conditions. Date

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

In accordance with the Agreement:

The number of days to achieve Substantial Completion is **45 days** from the date stated above for the commencement of the Contract Times, resulting in a date for Substantial Completion of _____; and the number of days to achieve readiness for final payment is **60 days** from the commencement date of the Contract Times, resulting in a date for readiness for final payment of _____.

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

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

Owner: **City of Chiloquin**

By (signature): _____

Name (printed): **Julie Bettles**

Title: **Mayor**

Date Issued: _____

Accepted: _____

Contractor: _____

By (signature): _____

Name (printed): _____

Title: _____

Date: _____

Copy: Engineer

Contractor's Application for Payment

| | |
|--|---|
| Owner: <u>City of Chiloquin</u> | Owner's Project No.: _____ |
| Engineer: <u>Adkins Engineering & Surveying, Inc.</u> | Engineer's Project No.: <u>1011-83</u> |
| Contractor: _____ | Contractor's Project No.: _____ |
| Project: <u>Mercantile Bulding Debris Pile Removal</u> | |
| Application No.: <u>1</u> | Application Date: _____ |
| Application Period: From _____ to _____ | |

| | | |
|--|--|------|
| 1. Original Contract Price | | \$ - |
| 2. Net change by Change Orders | | \$ - |
| 3. Current Contract Price (Line 1 + Line 2) | | \$ - |
| 4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total) | | \$ - |
| 5. Retainage | | |
| a. <u>5%</u> X <u>\$ -</u> Work Completed | | \$ - |
| b. _____ X <u>\$ -</u> Stored Materials | | \$ - |
| c. Total Retainage (Line 5.a + Line 5.b) | | \$ - |
| 6. Amount eligible to date (Line 4 - Line 5.c) | | \$ - |
| 7. Less previous payments (Line 6 from prior application) | | |
| 8. Amount due this application | | \$ - |
| 9. Balance to finish, including retainage (Line 3 - Line 4) | | \$ - |

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

| | |
|--------------------------|--------------------|
| Contractor: _____ | |
| Signature: _____ | Date: _____ |

| | |
|-----------------------------------|--------------------------|
| Recommended by Engineer | Approved by Owner |
| By: _____ | By: _____ |
| Title: _____ | Title: _____ |
| Date: _____ | Date: _____ |
| Approved by Funding Agency | |
| By: _____ | By: _____ |
| Title: _____ | Title: _____ |
| Date: _____ | Date: _____ |

Progress Estimate - Lump Sum Work

Contractor's Application for Payment

| | | | |
|-------------|--|---------------------------|---------|
| Owner: | City of Chiloquin | Owner's Project No.: | |
| Engineer: | Adkins Engineering & Surveying, Inc. | Engineer's Project No.: | 1011-83 |
| Contractor: | | Contractor's Project No.: | |
| Project: | Mercantile Bulding Debris Pile Removal | | |

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|-------------------|-------------|----------------------|--|------------------|---|--|----------------------------------|--------------------------------|---|
| Application No.: | 1 | | Application Period: | From | to | | Application Date: | | |
| A | B | C | D | E | | F | G | H | I |
| | | | Work Completed | | | | | | |
| | | | (D + E) From Previous Application (\$) | This Period (\$) | | | | | |
| Item No. | Description | Scheduled Value (\$) | | | Materials Currently Stored (not in D or E) (\$) | Work Completed and Materials Stored to Date (D + E + F) (\$) | % of Scheduled Value (G / C) (%) | Balance to Finish (C - G) (\$) | |
| Original Contract | | | | | | | | | |
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Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner: City of Chiloquin
 Engineer: Adkins Engineering & Surveying, Inc.
 Contractor: _____
 Project: Mercantile Bulding Debris Pile Removal

Owner's Project No.: _____
 Engineer's Project No.: 1011-83
 Contractor's Project No.: _____

| Application No.: <u>1</u> | | Application Period: From _____ to _____ | | Application Date: _____ | | | | | | | | | |
|-------------------------------------|-------------|---|-------|-------------------------|--------------------------------|---|--|--|--|--------------------------------|--------------------------------|----|---|
| A | B | C | D | E | F | G | H | I | J | K | L | | |
| Bid Item No. | Description | Item Quantity | Units | Contract Information | | Work Completed | | Materials Currently Stored (not in G) (\$) | Work Completed and Materials Stored to Date (H + I) (\$) | % of Value of Item (J / F) (%) | Balance to Finish (F - J) (\$) | | |
| | | | | Unit Price (\$) | Value of Bid Item (C X E) (\$) | Estimated Quantity Incorporated in the Work | Value of Work Completed to Date (E X G) (\$) | | | | | | |
| Original Contract | | | | | | | | | | | | | |
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| Original Contract Totals | | | | | \$ | - | | \$ | - | \$ | - | \$ | - |
| Change Orders | | | | | | | | | | | | | |
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| Change Order Totals | | | | | \$ | - | | \$ | - | \$ | - | \$ | - |
| Original Contract and Change Orders | | | | | | | | | | | | | |
| Project Totals | | | | | \$ | - | | \$ | - | \$ | - | \$ | - |

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

Owner: **City of Chiloquin** Owner's Project No.:
Engineer: **Adkins Engineering & Surveying, Inc.** Engineer's Project No.: **1011-83**
Contractor: Contractor's Project No.:
Project: **Mercantile Building Debris Pile Removal**
Date Issued: Effective Date of Work Change Directive:

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

Description:

[Description of the change to the Work]

Attachments:

[List documents related to the change to the Work]

Purpose for the Work Change Directive:

[Describe the purpose for the change to the Work]

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

Notes to User—Check one or both of the following

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

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

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

Basis of estimated change in Contract Price:

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

Recommended by Engineer

Authorized by Owner

By:

Title:

Date:

FIELD ORDER NO.: [Number of Field Order]

| | | | |
|--------------|---|--------------------------------|----------------|
| Owner: | City of Chiloquin | Owner's Project No.: | |
| Engineer: | Adkins Engineering & Surveying, Inc. | Engineer's Project No.: | 1011-83 |
| Contractor: | | Contractor's Project No.: | |
| Project: | Mercantile Building Debris Pile Removal | | |
| Date Issued: | | Effective Date of Field Order: | |

Contractor is hereby directed to promptly perform the Work described in this Field Order, issued in accordance with Paragraph 11.04 of the General Conditions, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference:

Specification Section(s):

Drawing(s) / Details (s):

Description:

[Description of the change to the Work]

Attachments:

[List documents supporting change]

Issued by Engineer

By: _____

Title: _____

Date: _____

CHANGE ORDER NO.: [Number of Change Order]

Owner: **City of Chiloquin**
Engineer: **Adkins Engineering & Surveying, Inc.**
Contractor:
Project: **Mercantile Building Debris Pile Removal**
Date Issued:

Owner's Project No.:
Engineer's Project No.: **1011-83**
Contractor's Project No.:

Effective Date of Change Order:

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

Description:

[Description of the change]

Attachments:

[List documents related to the change]

| Change in Contract Price | Change in Contract Times |
|---|---|
| Original Contract Price: \$ _____ | Original Contract Times: Substantial Completion: <u>150 Days</u> Ready for final payment: <u>180 Days</u> |
| [Increase] [Decrease] from previously approved Change Orders No. 1 to No. [Number of previous Change Order] : \$ _____ | [Increase] [Decrease] from previously approved Change Orders No.1 to No. [Number of previous Change Order] : Substantial Completion: _____ Ready for final payment: _____ |
| Contract Price prior to this Change Order: \$ _____ | Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____ |
| [Increase] [Decrease] this Change Order: \$ _____ | [Increase] [Decrease] this Change Order: Substantial Completion: _____ Ready for final payment: _____ |
| Contract Price incorporating this Change Order: \$ _____ | Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____ |

Recommended by Engineer (if required)

Accepted by Contractor

By: _____

Title: _____

Date: _____

Authorized by Owner

Approved by Funding Agency (if applicable)

By: _____

Title: _____

Date: _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: **City of Chiloquin**
Engineer: **Adkins Engineering & Surveying, Inc.**
Contractor:
Project: **Mercantile Debris Pile Removal**

Owner's Project No.:
Engineer's Project No.: **1011-83**
Contractor's Project No.:

This ☐ Preliminary ☐ Final Certificate of Substantial Completion applies to:

☐ All Work ☐ The following specified portions of the Work:

[Describe the portion of the work for which Certificate of Substantial Completion is issued]

Date of Substantial Completion: **[Enter date, as determined by Engineer]**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work must be as provided in the Contract, except as amended as follows:

Amendments to Owner's Responsibilities: ☐ None ☐ As follows:

[List amendments to Owner's Responsibilities]

Amendments to Contractor's Responsibilities: ☐ None ☐ As follows:

[List amendments to Contractor's Responsibilities]

The following documents are attached to and made a part of this Certificate:

[List attachments such as punch list; other documents]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Engineer

By (signature): _____

Name (printed): _____

Title: _____

Contractor

By (signature): _____

Name (printed): _____

Title: _____

NOTICE OF ACCEPTABILITY OF WORK

| | | | |
|--------------|---|--|----------------|
| Owner: | City of Chiloquin | Owner's Project No.: | |
| Engineer: | Adkins Engineering & Surveying, Inc. | Engineer's Project No.: | 1011-83 |
| Contractor: | | Contractor's Project No.: | |
| Project: | Mercantile Debris Pile Removal | | |
| Notice Date: | | Effective Date of the Construction Contract: | |

The Engineer hereby gives notice to the Owner and Contractor that Engineer recommends final payment to Contractor, and that the Work furnished and performed by Contractor under the Construction Contract is acceptable, expressly subject to the provisions of the Construction Contract's Contract Documents ("Contract Documents") and of the Agreement between Owner and Engineer for Professional Services dated **[date of professional services agreement]** ("Owner-Engineer Agreement"). This Notice of Acceptability of Work (Notice) is made expressly subject to the following terms and conditions to which all who receive and rely on said Notice agree:

1. This Notice has been prepared with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the Engineer's professional opinion.
3. This Notice has been prepared to the best of Engineer's knowledge, information, and belief as of the Notice Date.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's Work) under the Owner-Engineer Agreement and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Owner-Engineer Agreement.
5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract, an acceptance of Work that is not in accordance with the Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents, or to otherwise comply with the Contract Documents or the terms of any special guarantees specified therein.
6. This Notice does not relieve Contractor of any surviving obligations under the Construction Contract and is subject to Owner's reservations of rights with respect to completion and final payment.

Engineer

Owner

By (signature): _____

By (signature): _____

Name (printed): _____

Name (printed): _____

Title: _____

Title: _____

WAGE REQUIREMENTS

This is a public works project; therefore, the Contractor must comply with the Oregon Prevailing Wage Law (ORS 279C.800 through ORS 279C.870). The Contractor and all subcontractors must pay each worker not less than the applicable state prevailing wage rate.

The current state prevailing wage rates applicable to this Contract are listed in the publication "Prevailing Wage Rates for Public Works Contracts in Oregon as published by the Oregon Bureau of Labor and Industries (BOLI), the edition effective on the date of the first Advertisement for Bids of this Contract, including any amendments and/or and special wage determinations. BOLI publishes prevailing wage rates on January 1 and July 1 of each year. The state prevailing wage rates applicable to this Contract are those published on July 1, 2023. A copy of the state prevailing wage rates can be obtained from BOLI at the website: <http://www.oregon.gov/BOLI> and are hereby adopted as part of this Contract.

The Owner does not guarantee that labor can be procured for the minimum wage rates listed in the appended state and/or federal wage rate publications.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

| | Page |
|--|------|
| Article 1—Definitions and Terminology..... | 1 |
| 1.01 Defined Terms..... | 1 |
| 1.02 Terminology | 6 |
| Article 2—Preliminary Matters | 7 |
| 2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance..... | 7 |
| 2.02 Copies of Documents | 7 |
| 2.03 Before Starting Construction | 7 |
| 2.04 Preconstruction Conference; Designation of Authorized Representatives | 8 |
| 2.05 Acceptance of Schedules | 8 |
| 2.06 Electronic Transmittals..... | 8 |
| Article 3—Contract Documents: Intent, Requirements, Reuse | 9 |
| 3.01 Intent..... | 9 |
| 3.02 Reference Standards | 9 |
| 3.03 Reporting and Resolving Discrepancies | 10 |
| 3.04 Requirements of the Contract Documents | 10 |
| 3.05 Reuse of Documents | 11 |
| Article 4—Commencement and Progress of the Work | 11 |
| 4.01 Commencement of Contract Times; Notice to Proceed | 11 |
| 4.02 Starting the Work..... | 11 |
| 4.03 Reference Points | 11 |
| 4.04 Progress Schedule | 12 |
| 4.05 Delays in Contractor’s Progress | 12 |
| Article 5—Site; Subsurface and Physical Conditions; Hazardous Environmental Conditions | 13 |
| 5.01 Availability of Lands | 13 |
| 5.02 Use of Site and Other Areas | 14 |
| 5.03 Subsurface and Physical Conditions..... | 15 |
| 5.04 Differing Subsurface or Physical Conditions | 16 |

| | | |
|---|--|----|
| 5.05 | Underground Facilities | 17 |
| 5.06 | Hazardous Environmental Conditions at Site | 19 |
| Article 6—Bonds and Insurance..... | | 21 |
| 6.01 | Performance, Payment, and Other Bonds | 21 |
| 6.02 | Insurance—General Provisions | 22 |
| 6.03 | Contractor’s Insurance | 24 |
| 6.04 | Builder’s Risk and Other Property Insurance | 25 |
| 6.05 | Property Losses; Subrogation | 25 |
| 6.06 | Receipt and Application of Property Insurance Proceeds | 27 |
| Article 7—Contractor’s Responsibilities | | 27 |
| 7.01 | Contractor’s Means and Methods of Construction | 27 |
| 7.02 | Supervision and Superintendence | 27 |
| 7.03 | Labor; Working Hours | 27 |
| 7.04 | Services, Materials, and Equipment..... | 28 |
| 7.05 | “Or Equals” | 28 |
| 7.06 | Substitutes | 29 |
| 7.07 | Concerning Subcontractors and Suppliers | 31 |
| 7.08 | Patent Fees and Royalties | 32 |
| 7.09 | Permits | 33 |
| 7.10 | Taxes | 33 |
| 7.11 | Laws and Regulations..... | 33 |
| 7.12 | Record Documents..... | 33 |
| 7.13 | Safety and Protection..... | 34 |
| 7.14 | Hazard Communication Programs | 35 |
| 7.15 | Emergencies | 35 |
| 7.16 | Submittals | 35 |
| 7.17 | Contractor’s General Warranty and Guarantee | 38 |
| 7.18 | Indemnification | 39 |
| 7.19 | Delegation of Professional Design Services | 39 |
| Article 8—Other Work at the Site..... | | 40 |
| 8.01 | Other Work | 40 |
| 8.02 | Coordination | 41 |
| 8.03 | Legal Relationships..... | 41 |

| | |
|--|----|
| Article 9—Owner’s Responsibilities | 42 |
| 9.01 Communications to Contractor..... | 42 |
| 9.02 Replacement of Engineer | 42 |
| 9.03 Furnish Data | 42 |
| 9.04 Pay When Due..... | 42 |
| 9.05 Lands and Easements; Reports, Tests, and Drawings | 43 |
| 9.06 Insurance..... | 43 |
| 9.07 Change Orders | 43 |
| 9.08 Inspections, Tests, and Approvals..... | 43 |
| 9.09 Limitations on Owner’s Responsibilities | 43 |
| 9.10 Undisclosed Hazardous Environmental Condition..... | 43 |
| 9.11 Evidence of Financial Arrangements..... | 43 |
| 9.12 Safety Programs | 43 |
| Article 10—Engineer’s Status During Construction | 44 |
| 10.01 Owner’s Representative..... | 44 |
| 10.02 Visits to Site..... | 44 |
| 10.03 Resident Project Representative..... | 44 |
| 10.04 Engineer’s Authority | 44 |
| 10.05 Determinations for Unit Price Work | 45 |
| 10.06 Decisions on Requirements of Contract Documents and Acceptability of Work | 45 |
| 10.07 Limitations on Engineer’s Authority and Responsibilities | 45 |
| 10.08 Compliance with Safety Program..... | 45 |
| Article 11—Changes to the Contract | 46 |
| 11.01 Amending and Supplementing the Contract | 46 |
| 11.02 Change Orders | 46 |
| 11.03 Work Change Directives..... | 46 |
| 11.04 Field Orders..... | 47 |
| 11.05 Owner-Authorized Changes in the Work | 47 |
| 11.06 Unauthorized Changes in the Work..... | 47 |
| 11.07 Change of Contract Price | 47 |
| 11.08 Change of Contract Times..... | 49 |
| 11.09 Change Proposals..... | 49 |
| 11.10 Notification to Surety..... | 50 |

| | |
|--|----|
| Article 12—Claims..... | 50 |
| 12.01 Claims..... | 50 |
| Article 13—Cost of the Work; Allowances; Unit Price Work | 51 |
| 13.01 Cost of the Work | 51 |
| 13.02 Allowances | 55 |
| 13.03 Unit Price Work..... | 55 |
| Article 14—Tests and Inspections; Correction, Removal, or Acceptance of Defective Work | 56 |
| 14.01 Access to Work..... | 56 |
| 14.02 Tests, Inspections, and Approvals..... | 56 |
| 14.03 Defective Work | 57 |
| 14.04 Acceptance of Defective Work..... | 58 |
| 14.05 Uncovering Work | 58 |
| 14.06 Owner May Stop the Work | 58 |
| 14.07 Owner May Correct Defective Work..... | 59 |
| Article 15—Payments to Contractor; Set-Offs; Completion; Correction Period | 59 |
| 15.01 Progress Payments..... | 59 |
| 15.02 Contractor’s Warranty of Title | 62 |
| 15.03 Substantial Completion..... | 62 |
| 15.04 Partial Use or Occupancy | 63 |
| 15.05 Final Inspection | 64 |
| 15.06 Final Payment..... | 64 |
| 15.07 Waiver of Claims | 65 |
| 15.08 Correction Period | 66 |
| Article 16—Suspension of Work and Termination | 67 |
| 16.01 Owner May Suspend Work | 67 |
| 16.02 Owner May Terminate for Cause..... | 67 |
| 16.03 Owner May Terminate for Convenience..... | 68 |
| 16.04 Contractor May Stop Work or Terminate | 68 |
| Article 17—Final Resolution of Disputes | 69 |
| 17.01 Methods and Procedures..... | 69 |
| Article 18—Miscellaneous | 69 |
| 18.01 Giving Notice | 69 |
| 18.02 Computation of Times..... | 69 |

| | | |
|-------|-------------------------------|----|
| 18.03 | Cumulative Remedies | 70 |
| 18.04 | Limitation of Damages | 70 |
| 18.05 | No Waiver | 70 |
| 18.06 | Survival of Obligations | 70 |
| 18.07 | Controlling Law | 70 |
| 18.08 | Assignment of Contract..... | 70 |
| 18.09 | Successors and Assigns | 70 |
| 18.10 | Headings..... | 70 |

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

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

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

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

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

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

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

1.02 Terminology

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

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

ARTICLE 2—PRELIMINARY MATTERS

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

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, 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.

2.02 *Copies of Documents*

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

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

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

2.05 *Acceptance of Schedules*

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

2.06 *Electronic Transmittals*

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

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

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

3.02 *Reference Standards*

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

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

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

B. *Resolving Discrepancies*

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

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs) or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and

binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

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

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

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

4.02 *Starting the Work*

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

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires

relocation because of necessary changes in grades or locations and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

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

4.05 *Delays in Contractor's Progress*

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

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

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

5.01 *Availability of Lands*

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

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

5.02 *Use of Site and Other Areas*

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

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

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

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

5.03 *Subsurface and Physical Conditions*

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

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

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

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

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

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

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

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

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

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

5.05 *Underground Facilities*

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

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

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

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

5.06 *Hazardous Environmental Conditions at Site*

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

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

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

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

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

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

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

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

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

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

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

6.02 *Insurance—General Provisions*

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

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

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

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

6.03 *Contractor's Insurance*

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

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

6.04 *Builder's Risk and Other Property Insurance*

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

6.05 *Property Losses; Subrogation*

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

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

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

6.06 *Receipt and Application of Property Insurance Proceeds*

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

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

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

7.02 *Supervision and Superintendence*

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

7.03 *Labor; Working Hours*

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

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

7.04 *Services, Materials, and Equipment*

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

7.05 *"Or Equals"*

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

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

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

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

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

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents. The total amount of work subcontracted out shall not exceed 50% of the total amount without approval from Owner, Engineer and/or Agency.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

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

7.08 *Patent Fees and Royalties*

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

7.09 *Permits*

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

7.10 *Taxes*

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

7.11 *Laws and Regulations*

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

7.12 *Record Documents*

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

7.13 *Safety and Protection*

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

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

7.14 *Hazard Communication Programs*

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

7.15 *Emergencies*

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

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

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

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

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

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

D. Resubmittal Procedures for Shop Drawings and Samples

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

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

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

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

7.17 Contractor's General Warranty and Guarantee

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

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

7.18 Indemnification

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

7.19 Delegation of Professional Design Services

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

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

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

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

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

8.02 *Coordination*

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

8.03 *Legal Relationships*

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

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

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

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

9.02 *Replacement of Engineer*

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

9.03 *Furnish Data*

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

9.04 *Pay When Due*

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

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

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

9.06 *Insurance*

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

9.07 *Change Orders*

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

9.08 *Inspections, Tests, and Approvals*

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

9.09 *Limitations on Owner's Responsibilities*

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

9.10 *Undisclosed Hazardous Environmental Condition*

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

9.11 *Evidence of Financial Arrangements*

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

9.12 *Safety Programs*

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

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

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

10.02 *Visits to Site*

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

10.03 *Resident Project Representative*

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

10.04 *Engineer's Authority*

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

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

10.05 *Determinations for Unit Price Work*

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

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

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

10.07 *Limitations on Engineer's Authority and Responsibilities*

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

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

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

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

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

10.08 *Compliance with Safety Program*

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

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

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

11.02 *Change Orders*

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

11.03 *Work Change Directives*

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

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

11.04 *Field Orders*

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

11.05 *Owner-Authorized Changes in the Work*

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

11.06 *Unauthorized Changes in the Work*

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

11.07 *Change of Contract Price*

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

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

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

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.
- B. *Change Proposal Procedures*
 - 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
 - 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

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

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

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

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

11.10 *Notification to Surety*

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

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

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

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

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

13.01 *Cost of the Work*

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

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

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

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

c. *Construction Equipment Rental*

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

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

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

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

13.02 Allowances

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

13.03 Unit Price Work

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

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

E. *Adjustments in Unit Price*

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

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

14.01 *Access to Work*

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

14.02 *Tests, Inspections, and Approvals*

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

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

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

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

14.03 *Defective Work*

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

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

14.04 *Acceptance of Defective Work*

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

14.05 *Uncovering Work*

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

14.06 *Owner May Stop the Work*

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

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

14.07 Owner May Correct Defective Work

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

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

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

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

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

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

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

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

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

15.02 *Contractor's Warranty of Title*

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

15.03 *Substantial Completion*

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

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

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

15.04 *Partial Use or Occupancy*

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

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

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

15.05 *Final Inspection*

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

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

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

15.07 *Waiver of Claims*

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

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

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

15.08 *Correction Period*

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

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

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

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

16.02 *Owner May Terminate for Cause*

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

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

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

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

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

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

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

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

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

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

18.02 *Computation of Times*

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

18.03 *Cumulative Remedies*

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

18.04 *Limitation of Damages*

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

18.05 *No Waiver*

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

18.06 *Survival of Obligations*

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

18.07 *Controlling Law*

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

18.08 *Assignment of Contract*

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

18.09 *Successors and Assigns*

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

18.10 *Headings*

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

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

| | Page |
|---|------|
| Article 1— Definitions and Terminology..... | 1 |
| Article 2— Preliminary Matters | 1 |
| Article 3— Contract Documents: Intent, Requirements, Reuse | 1 |
| Article 4— Commencement and Progress of the Work | 2 |
| Article 5— Site, Subsurface and Physical Conditions, Hazardous Environmental Conditions..... | 2 |
| Article 6— Bonds and Insurance | 2 |
| Article 7— Contractor’s Responsibilities | 6 |
| Article 8— Other Work at the Site | 6 |
| Article 9— Owner’s Responsibilities | 6 |
| Article 10— Engineer’s Status During Construction | 7 |
| Article 11— Changes to the Contract | 7 |
| Article 12— Claims | 7 |
| Article 13— Cost of Work; Allowances, Unit Price Work..... | 8 |
| Article 14— Tests and Inspections; Correction, Removal, or Acceptance of Defective Work | 8 |
| Article 15— Payments to Contractor, Set Offs; Completions; Correction Period | 9 |
| Article 16— Suspension of Work and Termination | 11 |
| Article 17— Final Resolutions of Disputes | 11 |
| Article 18— Miscellaneous | 13 |
| Article 19— State Requirements | 13 |
| Article 20— Asbestos Disposal Procedures | 16 |

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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

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

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

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

SC-1.01.A.22 Add the following language at the end of the last sentence of Paragraph 1.01.A.22:

Engineer of Record or "EOR" is the Engineer of Record for the Work.

SC-1.01.A.30 Add the following language at the end of the last sentence of Paragraph 1.01.A.30:

Owner Authorized Representative or "OAR" is the authorized representative of the Owner.

SC-1.01.A.39 Add the following language at the end of the last sentence of Paragraph 1.01.A.39:

The Technical Specifications, and any Appendices are included under the definition of Specifications.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

SC-2.01 Add the following new subparagraph immediately after 2.01.B:

- C. OAR shall review the Performance Bond, Payment Bond, Certificate of Insurance, and supporting documentation for compliance with the Contract Documents. If the bonds or insurance coverage are not in compliance with the requirements of the Contract Documents, OAR shall promptly notify Contractor, and Contractor shall within 7 days secure bonds or insurance coverages that conform to the requirements of the Contract Documents. A Notice to Proceed shall not be issued until the bonds and insurance coverages have been reviewed and approved by Owner on recommendation of OAR.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.03 *Reporting Discrepancies*

SC-3.03.B.2 Add the following new Paragraph after Paragraph 3.03.B.1.b:

Where a conflict occurs between or within Specifications and Drawings, the more stringent requirements shall control, unless approved otherwise in writing by the OAR and concurred by the Owner.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.05 *Delays in Contractor's Progress*

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

5. *Weather-Related Delays*

- 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. Extreme or unusual weather that is typical for a given region, elevation, or season should not be considered abnormal weather conditions. Requests for time extensions due to abnormal weather conditions will be submitted to the OAR within five days of the end of the abnormal weather condition event.

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

5.06 *Hazardous Environmental Conditions*

SC-5.06.A Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely and are found in the Appendices:

| Report Title | Date of Report | Technical Data |
|---|----------------|----------------|
| Asbestos PLM Report, RP-01-01, Shingles | Aug. 27, 2021 | |
| Asbestos PLM Report, RP-01-02, Shingles | Aug. 27, 2021 | |
| Asbestos PLM Report, RP-02-01, Drywall | Aug. 27, 2021 | |
| Asbestos PLM Report, RP-02-02, Drywall | Aug. 27, 2021 | |
| Asbestos PLM Report, RP-03-01, Gray Caulk | Aug. 27, 2021 | |
| Asbestos PLM Report, RP-03-02, Gray Caulk | Aug. 27, 2021 | |
| Analytical Report | Aug. 27, 2021 | |

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

Add the following new subparagraph immediately after 6.01.H:

- I. Prior to starting work on a Contract or Subcontract for a public works Project, a Contractor or Subcontractor shall file with the Construction Contractors Board a public works bond with a corporate surety authorized to do business in the State of Oregon in the amount of \$30,000.
- 6.02 *Insurance—General Provisions*
- SC-6.02.N Amend Paragraph 6.02.N by striking out the following text: "10" and inserting the following text: "30"
- SC-6.02.N Add the following language at the end of the last sentence of Paragraph 6.02.N:
- The Contractor shall, within 20 days after such notification, provide replacement insurance which shall comply with the insurance requirements required by the Contract. Appropriate insurance certification shall be provided to the Owner. The Contractor shall stop Work if full insurance coverage is not in place.
- 6.03 *Contractor's Insurance*
- SC-6.03.C *Additional Insureds:* Contractor is to list Engineer of Record, EOR, Anderson Engineering & Surveying, and Owners Authorized Representative, OAR, Adkins Engineering & Surveying as additional insureds.
- 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).

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

- 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 standard Accord form and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Personal injury coverage.
 5. 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.
 6. 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.
- 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 |
| Products—Completed Operations Aggregate | \$1,000,000 |
| Personal and Advertising Injury | \$1,000,000 |
| Bodily Injury and Property Damage—Each Occurrence | \$1,000,000 |

- 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: |
|---|--|
| Bodily Injury | |
| Each Person | \$1,000,000 |
| Each Accident | \$1,000,000 |
| Property Damage | |
| Each Accident | \$1,000,000 |
| [or] | |
| Combined Single Limit | |
| Combined Single Limit (Bodily Injury and Property Damage) | \$1,000,000 |

- 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 | \$ 4,000,000 |
| General Aggregate | \$ 4,000,000 |

- 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. If such umbrella or excess liability policy was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$1,000,000 after accounting for partial attribution of its limits to underlying policies, as allowed above.
- L. *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.

| Pollution Liability | Policy limits of not less than: |
|----------------------------|--|
| Each Occurrence | \$ 1,000,000 |
| General Aggregate | \$ 1,000,000 |

6.05 *Property Losses; Subrogation*

SC-6.05 Delete Paragraph 6.05.A in its entirety and insert "Deleted".

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

SC-7.02.B Add the following language at the end of the last sentence of Paragraph 7.02.B:

The Contractor's superintendent shall be on the Project Site whenever any Work is being performed.

7.03 *Labor; Working Hours*

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be 4 10-hour days or 5 8-hour days in 1 week.
2. Schedule may only be changed if change is intended to be permanent.
3. All work will be done during daylight hours.

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.C:

- D. Contractor shall be responsible for the cost of any overtime pay or other expense incurred by the Owner for OAR's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular workday. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-7.05.A – Amend the third sentence of paragraph by deleting the following words:

Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item is permitted,

SC-7.05.A.1.a.3 – Amend the last sentence of Paragraph a.3 by deleting "and;" and adding a period at the end of Paragraph a.3.

SC-7.05.A.1.a.4 – Delete paragraph in its entirety and insert "Deleted."

ARTICLE 8—OTHER WORK AT THE SITE

No suggested Supplementary Conditions in this Article.

ARTICLE 9—OWNER'S RESPONSIBILITIES

No suggested Supplementary Conditions in this Article.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

No suggested Supplementary Conditions in this Article.

ARTICLE 11—CHANGES TO THE CONTRACT

SC-11.06.A Add the following language to the end of Paragraph 11.06.A:

Work for which the Contractor may claim a price adjustment or extension of time shall require an executed Change Order or Work Change Directive in order to be considered authorized. Work performed by the Contractor without an executed Change Order or Work Change Directive shall constitute acceptance of the Work by the Contractor and shall constitute waiver of any claim for adjustment of the Contract Price or Contract Time as a result of said change.

SC-11.09.B.2 Amend the sentence by deleting "15" and inserting "5".

ARTICLE 12—CLAIMS

SC-12.01.B Add the following language at the end of Paragraph 12.01.B:

The Claim shall be in sufficient detail to enable the other party to ascertain the basis and the amount of Claim. As a minimum, the following information must accompany any Claim submitted:

1. A detailed factual statement of the Claim providing all necessary dates, locations, items of Work, price adjustments, Contract Time adjustments, and other relevant and key information.
2. The name of each individual, official, or employee involved in or knowledgeable about the Claim.
3. The specific provisions of the Contract which support the Claim and a statement of the reasons why such provisions support the Claim.
4. If the Claim relates to a decision of the EOR/OAR which the Contract leaves to the EOR/OAR's discretion or as to which the Contract provides that the EOR/OAR's decision is final, the claimant shall set out in detail all facts supporting its position relating to the decision of the EOR/OAR.
5. The identification of any documents and the substance of any oral communications that support the Claim.
6. If an adjustment of Contract Time is sought:
 - a. The specific days and dates for which it is sought.
 - b. The specific reasons the claimant believes a time adjustment should be granted.
7. If price adjustment is sought, the exact amount sought shall be outlined in detail.

SC-12.01.C Add the following language at the end of Paragraph 12.01.C:

The Owner may consult the EOR/OAR on the merits of any Claim made by the Contractor.

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

13.01 *Cost of the Work*

SC-13.01 Supplement Paragraph 13.01.B.5.c.(2) by adding the following sentence:

The equipment rental rate book that governs the included costs for the rental of machinery and equipment owned by Contractor (or a related entity) under the Cost of the Work provisions of this Contract is the most current edition of Rental Rate Blue Books for Construction Equipment (Blue Book), Volumes 1, 2, and 3, published by Penton Media, Inc., and available from EquipmentWatch (telephone: 1-800-669-3282).

SC-13.01 Supplement Paragraph 13.01.C.2 by adding the following definition of small tools and hand tools:

For purposes of this paragraph, “small tools and hand tools” means any tool or equipment whose current price if it were purchased new at retail would be less than \$500.

SC-13.02.C Delete paragraph in its entirety and insert "Deleted".

13.03 *Unit Price Work*

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

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 extended price of a particular item of Unit Price Work amounts to 5 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
 - 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. if Contractor believes that Contractor has incurred additional expense as a result thereof, Contractor may submit a Change Proposal, or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, Owner may make a Claim, seeking an adjustment in the Contract Price.
4. Adjusted unit prices will apply to all units of that item.

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

No suggested Supplementary Conditions in this Article.

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

15.01 Progress Payments

SC-15.01.B.1 Amend the first sentence by replacing "20" with "10 calendar"

SC-15.01.B.4 Add the following language at the end of paragraph:

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

SC-15.01.B.4 Add the following 2 new Paragraphs immediately after paragraph SC-15.01.B.4:

5. The OAR will review the summary of Work submitted by the Contractor for which the Contractor is requesting payment. The OAR will either concur with the Contractor's summary of Work to date or inform the Contractor where the OAR does not agree with the Contractor's request. In the latter case, the Contractor may make the necessary corrections and resubmit the summary of Work completed to the OAR.
6. Upon agreement between the OAR and Contractor on the quantities of Work performed to date, the OAR will, within 5 days of agreement, prepare the Application for Payment and submit it to the Contractor for Contractor's signature.

SC-15.01.C.1 Amend first sentence by replacing "10" with "5 workdays"

SC-15.01.C.6 Add the following to Paragraph 15.01.C.6:

- f. third-party claims filed or evidence indicating probably filing of such claims.
- g. failure of Contractor to make payments properly or promptly to Subcontractors for material, labor, or equipment.
- h. damage to Owner or others; or
- i. failure of Contractor to file certified statements regarding payment of prevailing rates of wage.

SC-15.01.D.1 Delete paragraph in its entirety and insert the following in its place:

The Application for Payment with OAR's recommendations will be presented to the Owner for consideration. If the Owner finds the Application for Payment acceptable, the recommended amount less any reduction under the provisions of Paragraph 15.01.E will become due thirty (30) days after the Application for Payment is presented to the Owner, and the Owner will make payment to the Contractor.

SC-15.01 Add the following new Paragraph 15.01.F:

- F. For contracts in which the Contract Price is based on the Cost of Work, if Owner determines that progress payments made to date substantially exceed the actual progress of the Work (as measured by reference to the Schedule of Values), or present a potential conflict with the Guaranteed Maximum Price, then Owner may require that Contractor prepare and submit a plan for the remaining anticipated Applications for Payment that will bring payments and progress into closer alignment and take into account the Guaranteed Maximum Price (if any), through reductions in billings, increases in retainage, or other equitable measures. Owner will review the plan, discuss any necessary modifications, and implement the plan as modified for all remaining Applications for Payment.

SC-15.02.A Amend paragraph by deleting the following text: "7 days after".

15.03 *Substantial Completion*

SC-15.03 Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by OAR, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

SC-15.03.C Delete Paragraph 15.03.C in its entirety and insert the following:

- C. If OAR considers the Work substantially complete, OAR will prepare a punch list of items to be completed or corrected before final payment. The OAR will then confer with the Owner to see if the Owner has any objections as to whether the Project is substantially complete or to the accuracy of the attached punch list. If, after considering any objections the Owner may have, the OAR concludes that the Work is not substantially complete, OAR will notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If the Owner has no objections, the OAR will fix the date of Substantial Completion and execute and deliver to Owner and Contractor the Certificate of Substantial Completion with a punch list of items to be completed or corrected.

15.05 *Final Inspection*

SC-15.05.A Delete Paragraph 15.05.A in its entirety and insert the following:

- A. Upon receipt of the "Contractor's Completion Certificate" from Contractor that the entire Work or an agreed portion thereof is complete, OAR 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.

15.08 *Correction Period*

SC-15.08.A Delete Paragraph 15.08.A in its entirety and insert the following:

- A. If within one year after the date the Project is ready for final payment (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 1. correct the defective repairs to the Site or such other adjacent areas.
 2. correct such defective Work.
 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and

4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

SC-16.04 Delete Paragraphs 16.04.A and 16.04.B in their entirety and insert the following:

- 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) OAR fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 60 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and OAR, and provided Owner or OAR 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 OAR has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 60 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and OAR, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

17.02 *Arbitration*

SC-17.02 Add the following new paragraph immediately after Paragraph 17.01.

17.02 *Arbitration*

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with the American Arbitration Association's supplemental rules for Fixed Time and Cost Construction Arbitration. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be sent to OAR for information. The demand for arbitration will be made within the specific time required in Article 17, or if no specified time is applicable within a reasonable time after the matter in question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.
- C. The arbitrator(s) must be licensed OARs, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the Construction Arbitration

Rules that contemplate in-person hearings. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.

- D. The Arbitrators will have the authority to allocate the costs of the arbitration process among the parties but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- E. The award of the arbitrators must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.
- F. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.
- G. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including OAR, and OAR's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
 - 1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration.
 - 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings.
 - 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 - 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- H. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.
- I. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

ARTICLE 18—MISCELLANEOUS

No suggested Supplementary Conditions in this Article.

SC-19 Add Article 19 titled "State Requirements"

ARTICLE 19—STATE REQUIREMENTS

SC-19.01 Conditions Concerning Payment

- A. In accordance with ORS 279C.505 the Contractor shall:
 - 1. Make payment promptly, as due, to all persons supplying labor or material for the performance of the Work provided for in the Contract in accordance with ORS 279C.570.
 - 2. Pay all contributions or amounts due the Industrial Accident Fund from the Contractor or Subcontractor incurred in the performance of the Contract.
 - 3. Not permit any Lien or Claim to be filed or prosecuted against the State or a county, school district, municipality, municipal corporation, or subdivision thereof, on account of any labor or material furnished.
 - 4. Pay to the Department of Revenue all sums withheld from employees under ORS 316.167.
- B. If the Contractor fails, neglects, or refuses to make prompt payment of any Claim for labor or services furnished to the Contractor or Subcontractor by any person in connection with the Work as the Claim becomes due, the Owner may pay such Claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the Contractor by reason of the Contract (reference ORS 279C.515).
- C. If the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the Work within 30 days after receipt of payment from the Owner, the Contractor or first-tier Subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10-day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to the Contractor or first-tier Subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve District that includes Oregon on the date that is 30 days after the date when payment was received from the Owner or from the Contractor, but the rate of interest shall not exceed 30 percent. The amount of interest may not be waived (reference ORS 279C.515).
- D. If the Contractor or a Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public improvement Contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580 (reference ORS 279C.515).
- E. If the Contractor or a Subcontractor fails, neglects, or refuses to submit complete and appropriate certified payroll forms with the Application for Payment, the Owner shall

retain 25 percent of the amount due the Contractor until such forms are submitted (reference ORS 279C.845).

SC-19.02 Conditions Concerning Hours of Labor (reference ORS 279C.520 and ORS 279C.540)

- A. The Contractor may not employ a person for more than 10 hours in one day, or 40 hours in one week, except in cases of necessity, emergency, or when the public policy absolutely requires it, and in such cases the employee shall be paid at least time and a half pay for the following:
 - 1. For all overtime in excess of eight hours in any one day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday.
 - 2. For all overtime in excess of ten hours in any one day or 40 hours in any one week when the work week is four consecutive days, Monday through Friday.
 - 3. For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.
 - 4. Contractor shall give notice in writing to employees, either at the time of hire or before commencement of Work on the Project or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that employees may be required to work (reference ORS 279C.520 and 279C.540).
 - 5. Any worker employed by the Contractor is foreclosed from collecting any overtime pay provided in ORS 279C.540, unless a Claim for overtime pay is filed with the Contractor within 90 days from completion of the Contract (reference ORS 279C.545).

SC-19.03 Conditions Concerning Medical Care and Worker's Compensation (reference ORS 279C.530)

- A. The Contractor shall promptly, as due, make payment to any person, co-partnership, association, or corporation furnishing medical, surgical, and hospital care services or other needed care and attention, incident to sickness or injury, to the employees of the Contractor, of all sums that the Contractor agrees to pay for the services and all moneys and sums that the Contractor collected or deducted from the wages of employees under any law, contract, or agreement for the purpose of providing or paying for the services.
- B. All employers, including the Contractor, that employ subject workers who work under this Contract in the State of Oregon shall comply with ORS 656.017 and provide the required Worker's Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its Subcontractors complies with these requirements.

SC-19.04 Payment of Prevailing Wage Rates on Public Works Projects

- A. The Contractor and all Subcontractors employing workers on this public works contract must pay workers not less than the applicable prevailing wage rate for each trade or occupation (reference ORS 279C.838).
- B. Every Contractor and Subcontractor on a covered Project must file certified payroll records with the OAR for the Owner. Contractors and Subcontractors must complete a certified payroll statement for each week a worker is employed on the public Work Project. These certified payroll statements must be filed once a month, by the fifth business day of the following month, to the Owner (reference ORS 279C.845; OAR 839-025-0010).

- C. Owner Fee - The Owner will pay the required fee to the Prevailing Wage Unit of the Oregon Bureau of Labor and Industries for every contract awarded for a public works project which is regulated under the Prevailing Wage Law (reference ORS 279.800 to 279.870).

SC-19.05 Contractor's Relations with Subcontractors (Reference ORS 279C.580)

- A. The Contractor shall include in each subcontract for property or services entered into by the Contractor or first-tier Subcontractor the following:
 - 1. A payment clause that obligates the Contractor or first-tier Subcontractor to pay the associated Subcontractor for satisfactory performance under its subcontract within 10 days of receipt of such payment from the Owner or Contractor as applicable.
 - 2. An interest penalty clause that obligates the Contractor, or first-tier Subcontractor, if payment is not made within 30 days after receipt of payment from the Owner, to pay the associated Subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the payment clause included in the subcontract required above and in accordance with ORS 279C.580. The interest penalty shall be as outlined above and in ORS 279C.515 (2).
 - 3. The Contractor shall verify that the first-tier Subcontractor has filed the required payroll and certified statement(s) with the Owner or Owner's representative before the Contractor may pay the first-tier Subcontractor any amount owed, or the Contractor shall retain a portion of payment due as required by OAR 839-025-0010.
 - 4. All Contract provisions shall substantially comply with ORS 279C.580.

SC-19.06 Action on Payment Bonds

- A. The Contractor shall respond to Claims against applicable payment bonds in accordance with ORS 279C.600 through ORS 279C.625. Such response shall include notification of Owner that a Claim has been filed.

SC-19.07 Public Works Bond

- A. The Contractor shall have a public works bond filed with the Oregon Construction Contractors Board before starting Work unless exempt under ORS 279C.836 (7) or (8).
- B. The Contractor shall require every Subcontractor to have a public works bond filed with the Oregon Construction Contractors Board unless exempt under ORS 279C.836 (7) or (8).

SC-19.08 Salvage and Recycling

- A. If feasible and cost-effective, the Contractor shall salvage or recycle construction and demolition debris (reference ORS 279C.510).

SC-19.09 Environmental and Natural Resources (reference ORS 279C.525)

- A. The agencies listed below may have enacted ordinances or regulations which deal with the prevention of environmental pollution or the preservation of natural resources. The Contractor shall comply with any ordinances or regulations enacted or adopted by these agencies.
 - 1. Federal Agencies:
 - Department of Agriculture
 - Forest Service

- Natural Resources Conservation Service
- Department of Commerce
 - National Marine Fisheries Service
- Department of Defense
 - Army Corps of Engineers
- Environmental Protection Agency
- Department of Interior
 - Bureau of Sport Fisheries and Wildlife
 - Bureau of Outdoor Recreation
 - Bureau of Land Management
 - Bureau of Indian Affairs
 - Bureau of Reclamation
 - Fish and Wildlife Service
- Department of Labor
 - Occupational Safety and Health Administration
- Department of Transportation
 - Coast Guard
 - Federal Highway Administration
- 2. State Agencies:
 - Department of Agriculture
 - Department of Environmental Quality
 - Department of Fish and Wildlife
 - Department of Forestry
 - Department of Geology and Mineral Industries
 - Department of Human Resources
 - Department of State Lands
 - Department of Transportation
 - Land Conservation and Development Commission
 - Occupational Safety and Health Division
 - Soil and Water Conservation Commission
 - Water Resources Department
- 3. Local Agencies:
 - City Council
 - County Court
 - County Road Department
 - Rural Fire Protection District
 - Other Special Districts

SC-20 Add Article 20 titled "Asbestos Disposal Procedures"

ARTICLE 20—ASBESTOS DISPOSAL PROCEDURES

SC-20.01 *Dry Creek Landfill, Inc.* Disposal procedures for the asbestos material is found in the Appendices. Contractor will be required to complete the "ASN4 Asbestos Waste Shipment Reporting Form" and submit with the waste to the landfill.

APPENDIX
(Asbestos Disposal Procedures)

ASBESTOS DISPOSAL PROCEDURES



One West Main • Suite 401
Medford, OR 97501
541-779-4161
Fax 541-779-4366

1. The Landfill only accepts materials containing asbestos at Dry Creek Landfill, 5500 Highway 140 (see attached map), on Wednesdays from 7:30 a.m. until 11:00 a.m. Anyone bringing materials containing asbestos to the Landfill must notify the Landfill by calling a minimum of 24 hours before bringing the materials to the Landfill. Call 541-494-5491 to schedule your appointment. All questions regarding asbestos disposal at the Landfill should be directed to our main office at 541-779-4161.
2. All materials containing asbestos (either classified as “friable” or “non-friable”) must be adequately wetted and placed within properly labeled, air tight bags or containers approved by the Oregon Department of Environmental Quality (DEQ). If contained in plastic bags, the bags must have an inner and outer bag, with both bags sealed separately. The bags must have a minimum 6 mil thickness. 6 mil bags should be wrapped with a 10 mil scrim reinforced plastic liner* (burrito style) if material can puncture or tear the 6 mil bags. The bags or containers must be clearly labeled with the required warning regarding asbestos laden materials. The containers, when full, cannot weigh more than:

| | |
|---|-----------|
| Sealed double bags: | 40 pounds |
| Sealed cardboard boxes or other approved containers: | 65 pounds |

3. The outside bags or containers containing the asbestos laden materials must be properly labeled. At a minimum, these labels shall include:
 - Asbestos Warning Label
 - Name of Generator
 - Location from where the material was removed
 - Asbestos removal Contractor’s name and address

For small quantities of asbestos, a pre-paid double bag set is available at our main office located at 8001 Table Rock Road, White City. The cost is \$20.90 per set, which includes the cost of disposal.

4. The bags or containers will not be accepted for disposal if there are any holes, tears, ruptures, punctures, or other failures of the integrity of the bag or container. Improperly sealed bags or containers will not be accepted.

Off-loading of bagged or containerized asbestos laden materials shall occur at the designated location at the landfill. The off-loading of the materials shall be accomplished in a manner that prevents damage or potential rupture of the bag, liner, or container. Bagged or containerized materials removed by asbestos abatement contractors shall be off-loaded by the contractor’s personnel and carefully placed by hand or other approved mechanical method in the designated disposal location, (continued...)



ASBESTOS DISPOSAL PROCEDURES

(continued)

as supervised by and approved by Landfill personnel. The bags or containers shall not be allowed to “free-fall” to the ground. The personnel performing the unloading must be attired with required personal protective equipment and be certified asbestos abatement personnel. Homeowners who bring asbestos laden materials to the landfill in proper containers or bags must be capable of unloading their own vehicle. Landfill personnel will oversee that the material is properly deposited in the designated disposal area.

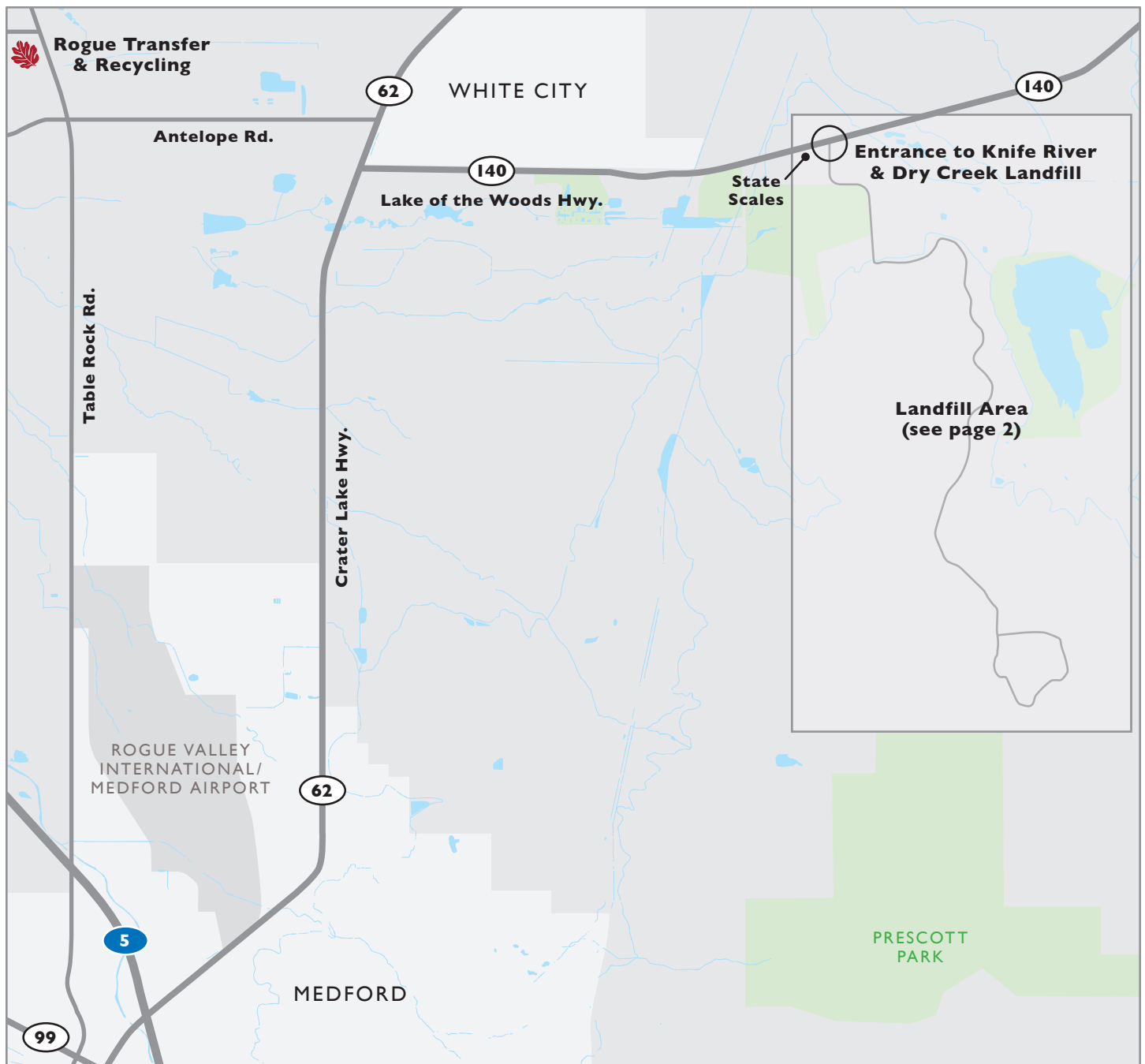
- 5.** Asbestos laden materials may placed in drop-box containers if the containers are lined as follows:
 - a.** The box must first be lined with a minimum 10-mil sacrificial plastic slip sheet. This will be the liner that makes first contact with the ground when unloading and the scrim reinforcement will keep the asbestos materials intact.
 - b.** Then the asbestos laden material must be enclosed by a minimum of (2) 6-mil plastic liners.
 - c.** Next the 6-mil plastic liners must be enclosed by a minimum 10-mil scrim reinforced plastic liner*.
 - d.** Each seam on each layer of the liners must be independently sealed to create a leak-proof seal, and thus encapsulating the waste. The seal must be adequately constructed so that the seal will not rupture during off-loading of the encapsulated waste from the drop-box container.
- 6.** The quantity of materials to be disposed of will be estimated by the Landfill gate attendant. The quantity will based on the size and numbers of containers, regardless as to whether the containers are full or not. The disposal fee is \$89.20 per cubic yard with a 1 yard minimum.
- 7.** The waste must be accompanied by a properly completed DEQ Waste Shipment Form (Form ASN-4). A copy of this form is attached. The total quantity of material estimated on the form must match the gate attendant’s volume estimate. Once the completed form is processed by the Landfill’s main office, a copy of the form will be mailed to the generator of the material. The generator must maintain a copy of this form in his/her records for a minimum of 3 years.
- 8.** Any asbestos-laden materials that are brought to the Landfill in inappropriate containers or bags will not be accepted for disposal. Since this is a violation of State laws and rules, we are required to and will immediately notify the DEQ of the incident.

If you should have any additional questions or need additional information, please call our office at 541-779-4161. Your compliance with these procedures is mandatory or your load may be rejected.

* The 10-mil scrim reinforced plastic liner can be obtained from these sources:

Raven Industries • Phone: 1-800-635-3456

Reef Industries • Phone: 1-800-231-6074



DIRECTIONS TO DRY CREEK LANDFILL (FROM THE SOUTH)

- Travel on Crater Lake Hwy toward White City.
- Turn right (east) on Hwy 140.
- Turn right (south) onto Entrance road, just past the state scales. Look for the Knife River and Dry Creek Landfill signs.
- Follow road as it veers left up the hill to the Scale Attendant office.

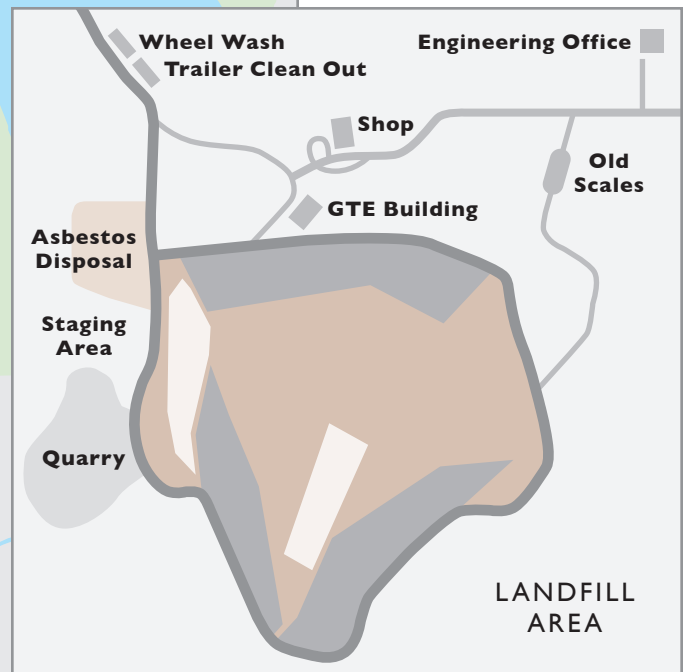
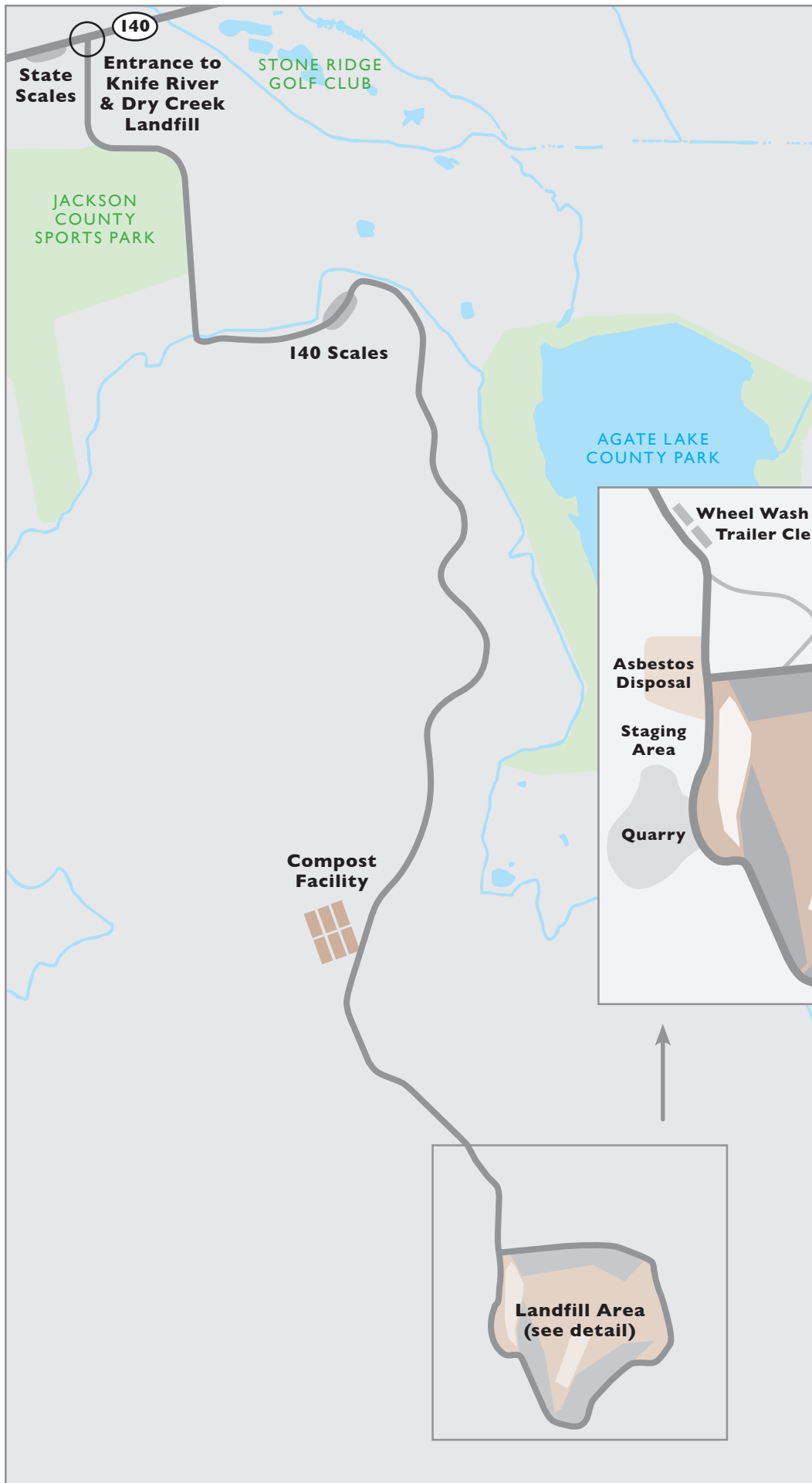
PLEASE NOTE: Electronic mapping systems may not provide the correct route for accessing the landfill. Please enter from Hwy 140 as directed here (do not use Dry Creek Rd).

DRY CREEK LANDFILL MAP

PAGE 1
SURROUNDING AREA



drycreeklandfill.com



DRY CREEK LANDFILL MAP

PAGE 2
LANDFILL AREA



drycreeklandfill.com

ASN4

Asbestos Waste Shipment Reporting Form

Please Print or Type. If you have questions, contact your local DEQ Regional Office in Portland 503-229-5364, Salem 503-378-5086, Medford 541-776-6107, Coos Bay 541-269-2721 Ext. 222, Bend 541-633-2019, or Pendleton 541-278-4626.

Waste Generator: (Contractor, Facility, or Operator)

1. Asbestos removal site name and address: _____

| | | | |
|-----------------------|------------|--------------|-----|
| Street | City/State | County | Zip |
| Contact person: _____ | | Phone: _____ | |

2. Contractor/Operator's name and address: _____ Phone: _____

| | | | |
|--------|------------|--------|-----|
| Street | City/State | County | Zip |
|--------|------------|--------|-----|

3. Waste disposal site: _____ Phone: _____

| | | | |
|--------|------------|--------|-----|
| Street | City/State | County | Zip |
|--------|------------|--------|-----|

4. Describe asbestos materials: _____

5. Containers: _____ Number: _____ Type: _____

6. Total quantity (cubic yards): _____

7. **Operator's Certification:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport according to all government regulations. All movement of this asbestos-containing material is recorded on this Waste Shipment Record Form.

Name: _____ Company: _____

Signature: _____ Date: _____

Address: _____ Phone: _____

Transporter(s):

8. Transporter #1: (Acknowledgment of receipt of materials)

Agent: _____ Company: _____

Address: _____ Phone: _____

Signature: _____ Date: _____

9. Transporter #2: (Acknowledgment of receipt of materials)

Agent: _____ Company: _____

Address: _____ Phone: _____

Signature: _____ Date: _____

Disposal: (Certification of receipt of asbestos materials covered by this manifest, except as noted in item 11 below.)

10. Waste Disposal Site: _____

Name and Title: _____ Date: _____

Signature: _____ Phone: _____

11. **Discrepancy Space:** (Add attachments as needed): _____

Instructions for using ASN 4

Asbestos Waste Shipment Reporting Form

This form is to be used as a permanent record for documenting asbestos-containing waste materials from removal site to final disposal. The Oregon Department of Environmental Quality (DEQ) regulation that applies to asbestos waste disposal is found in OAR 340-248-0280.

Waste Generator Section

(Numbers below correspond to numbers on the front of this Form)

1. Enter the name and address of the site where the asbestos waste was generated. Enter the name and phone number of the contact person for the contractor, facility, or operator of the asbestos waste generation site.
2. Enter the name, phone number and address of the person performing the asbestos abatement.
3. Enter the name, phone number and address of the disposal site that the waste is taken to.
4. Describe the materials being removed.
(i.e. pipe insulation, flooring, roofing, popcorn ceiling material, HVAC system insulation, Nonfriable asbestos.)
5. List the total number of containers and their type. Also enter one of the following container codes used in transporting each type of asbestos material. (Specify any other type of container used if not listed below):

| | |
|-----|---|
| DM | Metal drums, barrels |
| DP | Plastic drums, barrels |
| BA | 6 mil. plastic bags or wrapping |
| NFC | Leak-tight containerization for Nonfriable asbestos waste material. |

6. Give an estimate of the total quantity of cubic yards of material.
7. Print clearly the name of the company and their authorized signer. This section of the form must be signed and dated.

Note: The waste generator must retain a copy of the completed disposal form.

Waste Transporter Section

8. Transporter #1: Acknowledgment of receipt of asbestos waste materials. Print agent and company name, then sign and date.
9. Transporter #2: Acknowledgment of receipt of asbestos waste materials. Print agent and company name, then sign and date.

Note: If there are more than two transporters, attach a new waste shipment form.

Disposal Site Section

10. List the name of the waste disposal site, print the name, title and phone number, then sign and date form. This certifies that you have received the asbestos material covered by this manifest.
11. Discrepancy space. This space is used if there is a discrepancy between the amount of the material received by the landfill and the amount of material listed on the waste shipment report form.

Note: The waste disposal site operator must retain a copy of this form.

In addition, asbestos waste disposal regulations require that the Waste Disposal Site operators take the following actions:

- Send a copy of the completed and signed Waste Shipment Report Form to the Waste Generator as soon as possible, but no later than 30 days after the waste has been received at the disposal site.
- Notify DEQ immediately by telephone of improperly enclosed or uncovered waste. Submit a written report to DEQ the following working day, along with a copy of the Waste Shipment Report Form.
- If you discover a discrepancy between the quantity of waste designated on the Waste Shipment Report Form and the quantity of waste actually received, attempt to reconcile the discrepancy with the Waste Generator. You must report, in writing, to DEQ within 15 days after receiving the waste any discrepancies that cannot be reconciled. Submit a copy of the Waste Shipment Report Form with this report.

**SPECIFICATIONS
(ASBESTOS)**

September 5, 2023

City of Chiloquin
PO Box 196
127 South First Avenue
Chiloquin, Oregon 97624

Subject: Technical Specification & Addendum to Debris Pile Removal Design, Former Markwardt Brothers Garage Property, West Chocktoot Street & North 1st Avenue, Chiloquin, Klamath County, Oregon

Ms. Teresa Foreman:

This addendum has been prepared to supplement and modify the Environmental Abatement Design (Design) developed by Cardno, Inc. (Cardno) for the above-referenced property herein referred to as the “Site.” The scope of work detailed in the Design will guide corrective actions on the Site by the asbestos contractor selected by the City of Chiloquin through this procurement. As stated by Cardno:

“The Design was prepared to procure competitive bids from asbestos abatement contractors for equivalent work to be completed. In addition, this Design provides an asbestos abatement specification in accordance with the EPA Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) and Toxic Substances and Control Act (TSCA).”

The contractor selection will now be solicited by the City of Chiloquin through the city’s procurement process and the Design is included in the Contract Documents as the Technical Specifications to provide prospective bidders with the Technical Data to guide this project.

Debris Pile Removal Design Supplement

CHA Consulting, Inc. (CHA) and Anderson Engineering & Surveying, Inc. (Anderson) have reviewed the Design and provide this Addendum as the Asbestos Abatement Specification to be provided in the Contract Documents for this project.

The following items will supplement the technical specifications provided in the Design.

Item#1: Building Debris Pile Volume

Anderson mobilized to the Site in 2022 to survey the debris pile and collected 285 data points from the pile and surrounding area to calculate an estimated volume of material. Based on Anderson’s survey, the raw pile volume was estimated at 488 cubic yards (CY) with an estimated 20% to 40% void space in 80% of its footprint. Anderson personnel noted approximately 20% of the total pile is packed with dirt and bricks, and showing some vegetation growth on the upper surface. The remaining 80% consists of large and loose building materials – plywood sheets, a railroad tie, wood, pipes, glass, and insulation.

Based on the surveyed volume and visual observation of material in the Pile, Anderson estimated a material volume for disposal at approximately **300 CY**.

In addition to the debris pile, a section of brick wall associated with the former building remains in place along the existing building adjoining to the south. The section of standing wall will require removal in conjunction with the debris pile. The wall measures 13" (width) x 14' (height) x 88' (length) with an estimated volume of approximately **50 CY**. Due to the unstable nature of the wall and the potential for collapse or demolition activities to intermingle with the existing Debris Pile, CHA and Anderson recommend that the wall be demolished and disposed of as ACM waste in conjunction with the debris pile.

Based on the information provided in this Design, CHA and Anderson estimate:

- A quantity of ACM waste for disposal = **350 CY**
- A contingency volume of ACM waste = **100 CY**

Item#2: Landfill Disposal of ACM Waste

As discussed in the Contract Documents, the ACM waste from this project is approved for disposal at Dry Creek Landfill at 5500 Highway 140 in White City, Oregon. The City of Chiloquin has a negotiated rate for disposal and will be invoiced directly by the landfill for disposal fees.

The city has additionally received preliminary approval from Dry Creek Landfill to dispose of ACM waste from this project on additional days outside the ACM disposal schedule (Wednesdays only) However, it is the responsibility of the contractor to formalize landfill approval for the disposal of ACM outside of the current approved schedule. The Dry Creek Landfill disposal documents are attached to the Contract Documents.

Again, all ACM waste associated with this project must be transported to Dry Creek Landfill for disposal.

Item#3: Site Water Supply

The City of Chiloquin will provide water to the selected contractor to facilitate adherence with the wet methods described in 3.3.4 of the Design. Water is available to the contractor from the City of Chiloquin Sewage Treatment Plant at 5700 South Klamath Avenue, Chiloquin, Oregon.

Equipment required to transport, store, and dispense water sufficient to maintain “Adequately Wet” material per EPA 340/1-90-019 will be the responsibility of the contractor with associated costs included in the contractor’s bid.

Item#4: Traffic Plan

CHA and Anderson have prepared the required Traffic Plan detailed in Figure 1 of the Drawings in the Contract Documents. The truck ingress to the Site is provided via the city alley accessed off East Yahooskin Street. Trucks will traverse the alley to the loading area between the alley and North 1st Avenue. Egress from the site will be provided by a stabilized construction entrance onto North 1st Avenue.

It should be noted that staging or movement of trucks is prohibited on the east adjoining property to the site or south along the city alley beyond the pile. No trucks should enter the alley from either West Chocktoot or North 2nd Avenue (via adjoining properties).

Item#5: Stabilized Construction Entrance

CHA and Anderson have prepared the Stabilized Construction Entrance design to supplement the scope of work to be carried out by the selected contractor. The design is provided in Figure 2 of the Drawings in the Contract Documents.

Debris Pile Removal Design Modifications

The selected contractor should adhere to the Design as the technical specification taking into account the following modifications discussed in this addendum.

Section 1.4 Davis Bacon Act

Oregon BOLI wage rates listed in the Contract Documents supersede any Davis Bacon Act wage requirements listed in the Design.

Section 2.1 Execution Plan

The execution plan included in the Design is superseded by the Contract Documents

Section 2.4 Permits & Notifications

Any permit and/or notification requirements listed in the Contract Documents supersede those listed in the Design.

Bid Form (Attachment)

The Bid Form provided in the Design is superseded by bid specifications provided in the Contract Documents

Conclusion

The referenced Figures 1 and 2 (Items #4 & #5) and the Design are attached to this Addendum. The attached Design is provided as the technical specification for the removal ACM debris at the Site, taking into consideration the supplemental information and modifications discussed in this Addendum.

Thank you for the opportunity and please reach to the undersigned if you have any questions.

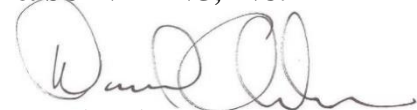
Sincerely,

CHA CONSULTING, INC.



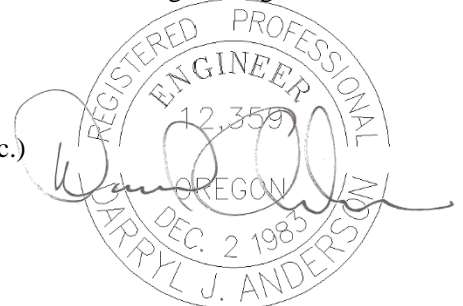
Keith Ziobron
Associate Vice President
kziobron@chacompanies.com

**ANDERSON ENGINEERING
& SURVEYING, INC.**

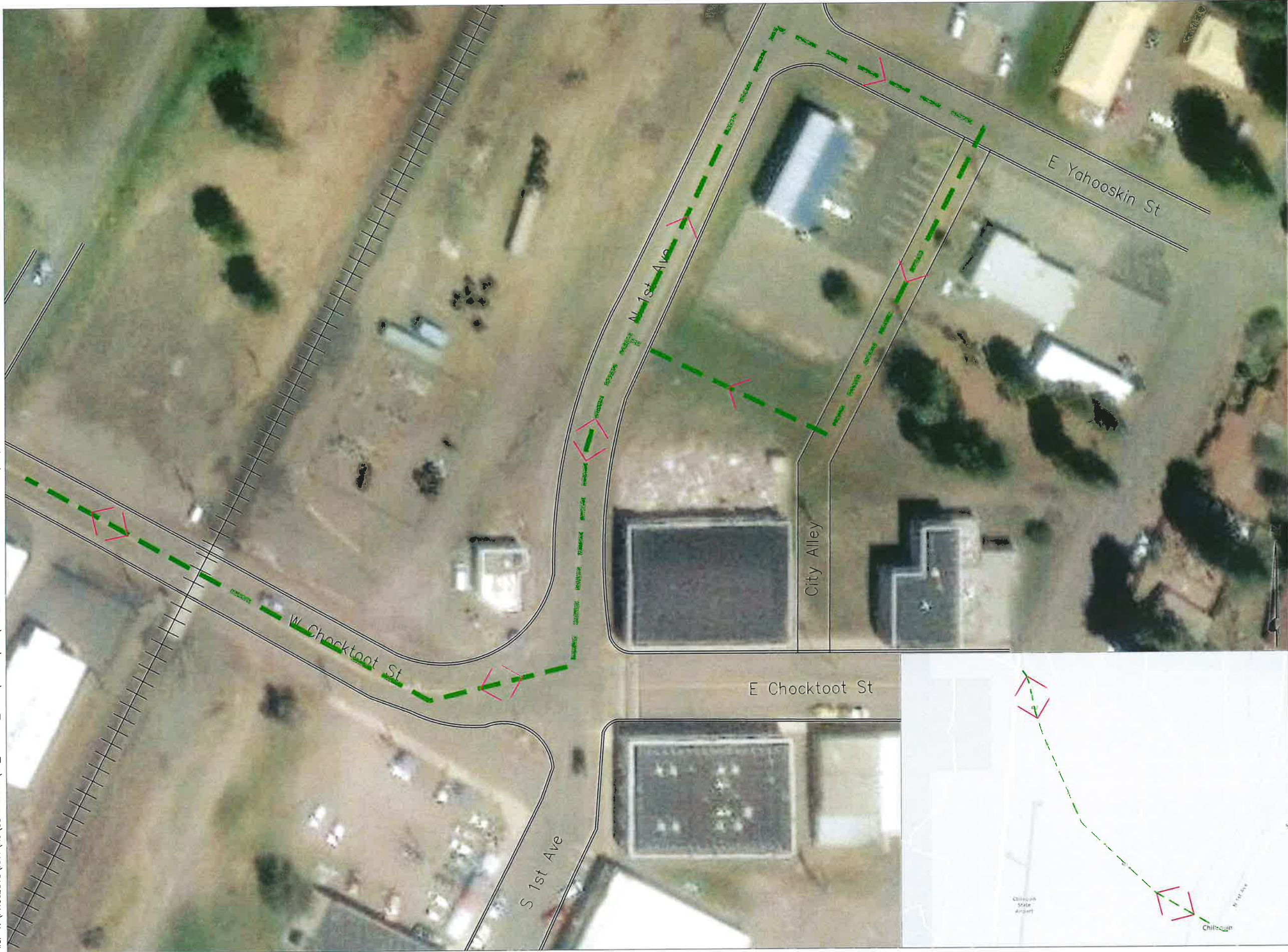


Darryl Anderson, PE
President
darryla@andersonengineering.com

Attachments: Figures
Debris Pile Removal Design, February 25, 2021 (Cardno, Inc.)



EXPIRES DEC. 31, 2023



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CHA

270 Peachtree Street NW, Suite 1500
Atlanta, GA 30303-1283
678.951.5000 www.chacompanies.com

EA

Anderson Engineering & Surveying, Inc.
7581 Hwy 395
Lakeview, Oregon 97630

City of Chiloquin
127 South First Ave
Chiloquin, OR 97624

REGISTERED PROFESSIONAL
ENGINEER
12,359
OREGON
DEC. 2, 1983
GARRY L. ANDERSON
12/31/23

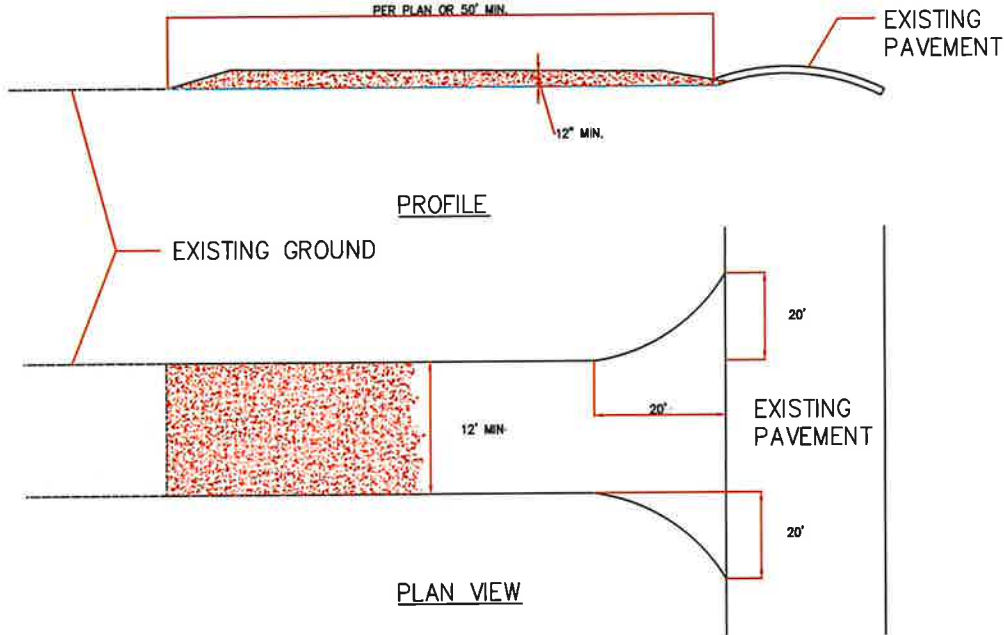
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| No. | Submittal / Revision | App'd | By | Date |
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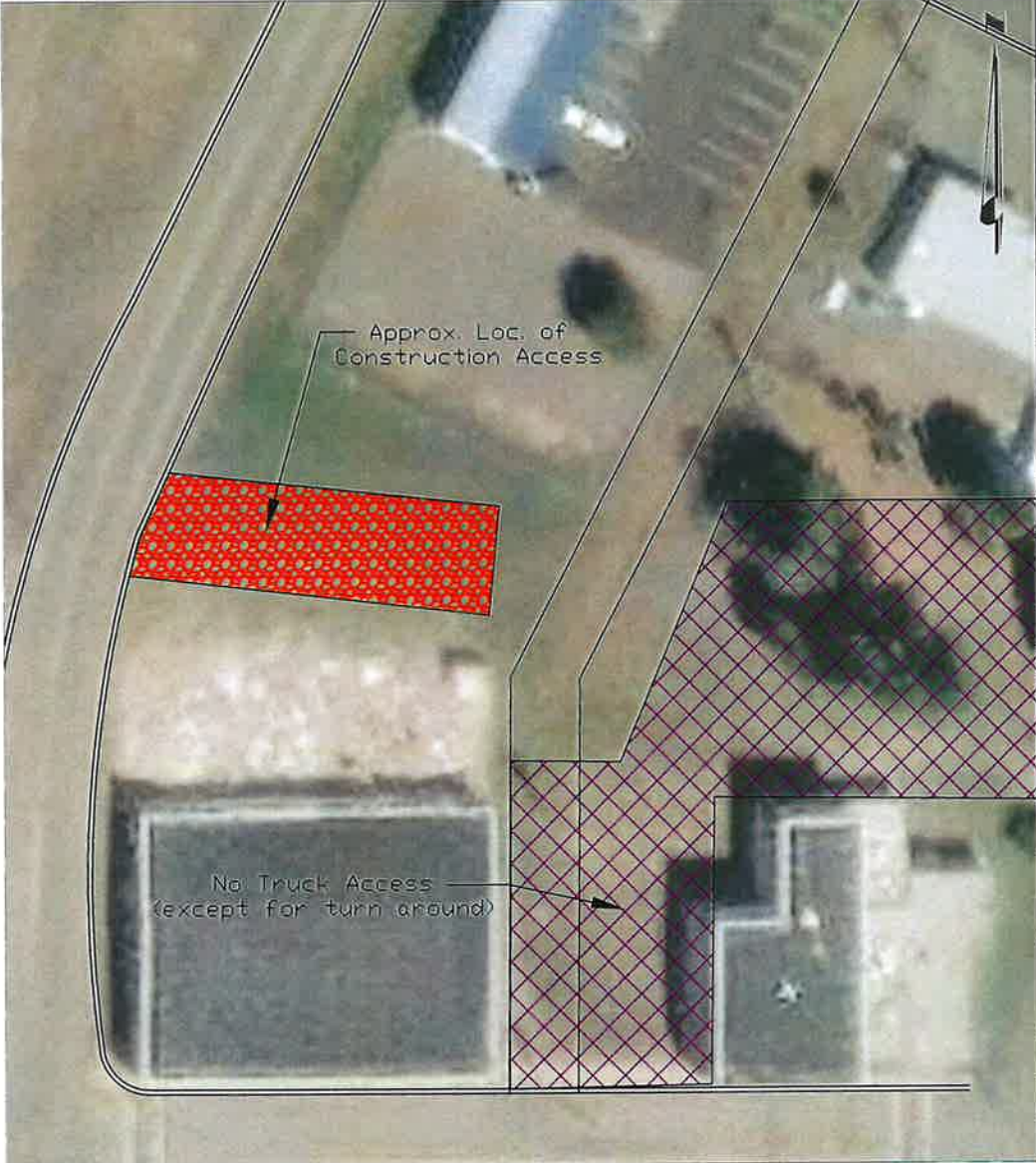
Former Chiloquin Mercantile Building
1st Avenue & West Chocktoot Street
Chiloquin
Klamath County, Oregon

TRAFFIC PLAN
Truck Route

| Designed By: | Project No: | Drawing No: |
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| SU | 081515 | 1 |
| Drawn By: | Scale: | |
| SU | Not to Scale | |
| Checked By: | Issue Date: | |
| KZ | Aug-23-23 | |



- 1. STONE SIZE—USE AASHTO M43 SIZE 3 COARSE AGGREGATE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH – NOT LESS THAN 50 FEET
- 3.
- 4. THICKNESS – NOT LESS THAN 12”.
- 5. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ACCESS TO SITE.
- 6. EXISTING ROAD SIDE DRAINAGE SHALL BE MAINTAINED.
- 7. SURFACE WATER – IF APPLICABLE, ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 8. MAINTENANCE—THE ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT OR STONE SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 9. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 10. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



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Former Chiloquin Mercantile Building
1st Avenue & West Chocktoot Street
Chiloquin
Klamath County, Oregon

STABILIZED CONSTRUCTION ENTRANCE

| Designed By: | Project No: | Drawing No.: |
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| Drawn By: | Scale: | |
| SU | Not to Scale | |
| Checked By: | Issue Date: | |
| KZ | Aug-23-23 | |

Debris Pile Removal Design

Former Markwardt Brothers Garage
West Chocktoot Street & North 1st Avenue
Chiloquin, Klamath County, Oregon

Prepared for: City of Chiloquin
EPA Cooperative Agreement #BF-02J00701
February 25, 2022



now



Contact Information

Cardno Inc., now Stantec
6611 Bay Circle
Suite 220
Norcross, Georgia 30071, USA
Telephone: +1 (678) 433 1197
www.cardno.com
www.stantec.com

Document Information



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|-----------------|--|
| Prepared for | City of Chiloquin P.O. Box 196 Chiloquin, Oregon 97624 |
| Project Name | Debris Pile Removal Design West Chocktoot Street Chiloquin, OR |
| Cardno Project# | CHILOQ300 |
| EPA ACRES# | 250932 |
| Date | February 2022 |

Document History

| Version | Effective Date | Description of Revision | Prepared by | Reviewed by |
|---------|----------------|-------------------------|-------------------|---------------------|
| 1.0 | 2/25/2022 | Original Document | Robert Hall, P.G. | Keith Ziobron, P.E. |
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Table of Contents

| | | |
|----------|--|----------|
| 1 | Introduction/Background | 1 |
| 1.1 | Site Description | 1 |
| 1.2 | Building History and Property Description | 1 |
| 1.3 | Previous Environmental Assessments | 1 |
| 1.4 | Davis-Bacon Act | 2 |
| 2 | Scope of Work | 3 |
| 2.1 | Execution Plan | 3 |
| 2.2 | Health and Safety Plan | 4 |
| 2.3 | Training | 4 |
| 2.4 | Permits and Notifications | 5 |
| 2.5 | Mobilization and Site Preparation | 5 |
| 2.6 | Asbestos-Containing Materials | 5 |
| 2.7 | Demobilization | 5 |
| 3 | Asbestos Abatement Specification | 7 |
| 3.1 | Part 1 – General | 7 |
| 3.1.1 | Introduction | 7 |
| 3.1.2 | References | 7 |
| 3.1.3 | Definitions | 9 |
| 3.1.4 | Contractor Responsibilities | 13 |
| 3.1.5 | Owner Responsibilities | 14 |
| 3.1.6 | Job Conditions | 14 |
| 3.1.7 | Personnel | 16 |
| 3.1.8 | Emergency Planning | 16 |
| 3.1.9 | Authority to Stop Work | 17 |
| 3.1.10 | Agreement to Pay Fines | 17 |
| 3.1.11 | Hold Harmless Agreement | 17 |
| 3.2 | Part 2 – Procedures Prior to Starting Abatement | 17 |
| 3.2.1 | Post Warning Signs and Establish Regulated Area | 17 |
| 3.2.2 | Decontamination Facilities | 17 |
| 3.2.3 | Segregation of Work Areas – Gross Removal Areas | 18 |
| 3.2.4 | Preparation of Work Area for Abatement | 18 |
| 3.2.5 | Isolation and Shutdown of Building HVAC System | 19 |
| 3.2.6 | Negative Pressure Establishment and Maintenance | 19 |
| 3.3 | Part 3 – Procedures for Friable Asbestos Abatement | 19 |
| 3.3.1 | Entry and Exit from Work Area | 19 |
| 3.3.2 | Respiratory Protection during Asbestos Removal | 20 |
| 3.3.3 | Work Practices | 20 |
| 3.3.4 | Asbestos Removal Procedures – General | 20 |
| 3.3.5 | Asbestos Removal Procedures – Detailed | 21 |
| 3.3.6 | Clean Up Procedures | 21 |

| | | |
|----------|----------------------------|-----------|
| 3.3.7 | Air Monitoring | 21 |
| 3.3.8 | Disposal of Asbestos Waste | 22 |
| 4 | References | 24 |

Bid Form

Contractor Bid Form

Tables

- 1 Summary of ACM Bulk Sample Results
- 2 Summary of Lead Waste Characterization Results

Figures

- 1 ACM Sample Location Map
- 2 TCLP Lead Sample Location Map

Appendices

- A Photo Log
- B Laboratory Reports – Cardno April 2021 Sampling Event
- C Asbestos Inspector and Project Designer Certificates

1 Introduction/Background

This Environmental Abatement Design (Design) has been prepared for the Former Markwardt Brothers Garage property located at the northeast corner of West Chocktoot Street and North 1st Avenue, in Chiloquin, Klamath County, Oregon (site) to programmatically ready the site for redevelopment. This project details the removal of a construction and demolition (C&D) debris pile from the collapsed former Chiloquin Mercantile that is contaminated with asbestos-containing materials (ACM). The scope of work detailed in this Design will be initiated upon procurement of an asbestos abatement contractor (Contractor), which is expected to occur in March 2022.

This Design was prepared to procure competitive bids from asbestos abatement contractors for equivalent work to be completed. In addition, this Design provides an asbestos abatement specification in accordance with the EPA Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) and Toxic Substances and Control Act (TSCA).

1.1 Site Description

According to the Klamath County Tax Assessors office, the site consists of two tax parcels totaling approximately 0.55-acres, identified by tax parcel identification numbers 3407-034DC-00500 and 3407-034DC-00400. The parcels are situated along North 1st Avenue and West Chocktoot Street, and consist of undeveloped land (north parcel) and a single-story approximately 8,500 square-foot former automotive garage/service station, and the subject debris pile. The site layout is provided on **Figure 1**.

1.2 Building History and Property Description

According to the City of Chiloquin Public Works Department, the automotive garage operated as an auto repair/car dealership and gasoline service station from the 1930s through the 1960s; a second-hand store in the 1970s; and the Juniper Wood Products facility in the 1980s. A commercial building formerly occupied by the Chiloquin Mercantile adjoined the garage's north wall until it collapsed due to structural failure in approximately 2018. The remnants of this building are the subject C&D debris pile. The area to the north of the debris pile consists of vacant land that was once occupied by a rooming house.

The surrounding area is primarily developed with commercial buildings associated with downtown Chiloquin. Photos of the site and debris pile are provided in **Appendix A**.

1.3 Previous Environmental Assessments

The following investigations, assessments, and/or applications have been completed at the site:

- Phase I Environmental Site Assessment (ESA), Cardno, May 2021
- Asbestos and Lead-Based Paint Survey, Cardno, May 2021
- Oregon Department of Environmental Quality (ODEQ) Voluntary Cleanup Program Application, Cardno, June 2021 (ODEQ approval)
- Phase II ESA and Debris Pile Sampling, Cardno, August 2021
- Updated Phase I ESA, Cardno, November 2021

Valuable information was collected during the execution and preparation of the previous environmental assessments; however, this design focuses on the results of the Phase II ESA as presented in the Debris Pile Sampling report (Cardno, August 2021) that included the collection and analysis of asbestos and lead toxicity characteristic leachate procedure (TCLP) samples.

Asbestos:

There were 6 bulk material samples collected from 3 homogenous areas analyzed for asbestos. Sample locations are provided on **Figure 1**. The two drywall samples collected were split by the laboratory into applicable layers and found to contain 2 percent chrysotile asbestos. Due to the nature of the debris pile, the ACM cannot be completely segregated from the pile, therefore the entire pile must be treated as an asbestos-contaminated material and subject to asbestos abatement regulations. The asbestos laboratory report is provided in **Appendix B**.

Lead:

There were 2 composite samples collected from the debris pile and analyzed for lead via TCLP for waste characterization purposes. Sample locations are provided on **Figure 2**. The results were below the reporting limit for lead. The TCLP lead laboratory report is provided in **Appendix B**.

1.4 Davis-Bacon Act

All abatement work is expected to be partially funded by federal funds and therefore must comply with the Davis-Bacon Act (DBA) which requires payment of the prevailing wage rate for cleanup activities. The budget and schedule must take this into account. More details regarding the DBA can be found on the US Department of Labor's (DOL) website:

<https://www.dol.gov/whd/regs/compliance/whdfs66.pdf>.

Additionally, work conducted under Business Oregon contracts must also comply with State labor standards and wage rates found in Oregon Revised Statutes (ORS) Chapter 279C.

Note: The contractor's bid must affirm that the bid has been developed and the work completed upon award will comply with all conditions of the Davis-Bacon Act and ORS Chapter 279C

2 Scope of Work

The Contractor will perform the following tasks as part of the Scope of Work:

- Prepare a general Execution Plan and Site-Specific Health and Safety Plan (HASP) for review and approval. Establish decontamination stations for personnel and vehicles, traffic patterns, staging areas, and a waste management plan for review and approval.
- Prepare all regulatory agency notifications, permits, and compliance documentation required to facilitate the work.
- Remove, containerize, transport, and dispose of the asbestos-contaminated debris pile. The extent of the confirmed asbestos-contaminated debris pile is shown on **Figure 1**. The debris pile consists of all remnant building debris (brick, mortar, glass, drywall/joint compound, plaster, wood, roofing materials, and etc).
- Final cleaning of the underlying concrete slab must be completed to remove any potential residual ACM. Visually confirm that all debris and residual material has been removed from the remaining concrete slab or underlying soil where concrete slab is not present. Any depressions observed in the concrete slab or underlying soil must be backfilled with #57 stone or equivalent and appropriately compacted.
- It is assumed that that duration of this project will be short and only a final closure report will be required. A final closure report will be provided by the contractor that includes all of the waste documentation and certification that all regulated and/or specified materials have been removed from the site.

2.1 Execution Plan

The following information is required to be submitted as part of the Contractor's Execution Plan submittal:

- Within 10 business days of the Contractor's Agreement execution, a detailed Execution Plan that describes how the Contractor proposes to conduct the requested work activities must be submitted to the Owner and the Owner's Representative.
 - Owner – City of Chiloquin
 - Contact: Teresa Foreman (email: Chicityhall@gmail.com)
 - Owner's Representative – Cardno
 - ~~Contact: Keith Ziobron (email: keith.ziobron@cardno.com) or Robert Hall (email: Robert.m.hall@cardno.com)~~
- The Execution Plan must, at a minimum, include the following:
 - Identification of all personnel, equipment, and materials to be used.
 - Identification of all subcontractors (if any) to be used and their role in conducting elements of the Work. Owner's Representative must give written approval of all subcontractors prior to their entering the facility.

- Truck traffic routes, staging areas, personnel decontamination stations, and parking areas for Site personnel.
- Proposed waste management approach (including collection, segregation, and containerization of wastes, transportation & disposal for all waste, and which disposal facility to be used)
- Proposed execution schedule showing the work days and hours within 6:00 a.m. – 6:00 p.m., Monday – Friday (unless otherwise approved by the Owner).
- Provide names and resumes of its nominated key personnel (such as, but not limited to, Project Manager, Site Supervisor, and Site Health and Safety Officer) for Owner's Representative acceptance.

2.2 Health and Safety Plan

Contractor must prepare a site-specific HASP in accordance with OSHA requirements as specified in Code of Federal Regulations (CFR) Title 40 Part 1910.120 and 29 CFR 1926, as applicable, as well as Construction Safety 29 CFR Part 1926 – OSHA General Construction Standards and 29 CFR Part 1926 Subpart T – Standards for Demolition Activities.

Contractor must provide the HASP to the Owner's Representative for review at least five days prior to Contractor's mobilization. All site-specific HASPs must be adhered to during the work and include the personal protective equipment (PPE) required to safely perform the work. PPE will at a minimum include the following: protective clothing, respirator (when required), safety toe shoes, long pants, high-visibility (reflective) vest or garment, safety glasses with side shields, and a hard hat. Other tasks may warrant additional PPE such as cut-resistant gloves, hearing protection, and respiratory protection. The HASP will detail worker protection and monitoring measures for the regulated constituents present on Site.

Prior to beginning any work, Contractor will provide a health and safety orientation to personnel working on the project. The purpose of the orientation will be to confirm that site personnel have a firm understanding of the project hazards and the administrative and/or engineered controls implemented to control these hazards.

At the start of each work day and after lunch prior to re-initiation of work, each Contractor will participate in a tailgate safety meeting. The meeting will be attended by all Contractor and subcontractor personnel working at the site as well as an Owner's representative. The health and safety meetings will be effective in reinforcing the concepts presented in the HASP, helping personnel stay focused on implementing safe work practices, and be documented by a tailgate safety form signed by all personnel in attendance.

In addition to the above requirements, personnel must abide by site-specific safety rules and procedures, such as obtaining relevant work permits, non-smoking requirements, and drug-free workplace requirements.

2.3 Training

All onsite personnel involved in handling/removal of regulated (or potentially regulated) materials must have, at a minimum, OSHA 40-hour Hazardous Waste Training (29 CFR 1910.120 and 1926.65) with the corresponding annual 8-hour refresher courses and be a DEQ-licensed asbestos abatement contractor. Copies of relevant individual training certificates are required to be on-site during abatement activities.

2.4 Permits and Notifications

Upon notice to proceed and prior to mobilization, the Contractor will prepare and secure the applicable permits, licenses, and notifications necessary for executing the asbestos abatement, cleaning, and demolition tasks. In addition to the Federal (NESHAP notification) and State of Oregon (ASN-1) requirements, the site is located within the City limits of Chiloquin and may require local permits or notifications. The site is also adjacent to an Oregon state highway and additional Oregon Department of Transportation (ODOT) permit or notification may be required. The Contractor is required to submit draft applications/notifications to the Owner's Representative for review and approval at least 3 days prior to submittal to any regulatory authority. A copy of the finalized documentation must be present during operations.

2.5 Mobilization and Site Preparation

Various mobilization activities must be completed prior to initiating the work. These activities aid in preparing and maintaining a safe site and are paramount to the successful completion of any project. These activities will include, but not be limited to:

- Mobilize the necessary personnel, equipment, supplies, materials, and resources to the site to perform the work
- Conduct a pre-construction meeting at the site prior to beginning work
- Delineate work zones, including posting necessary signs, warning tape, etc. Additional barriers may be required to protect travelers on the adjacent North 1st Street
- Set up staging areas for equipment and supplies as necessary
- Mobilize decontamination stations and sanitary facilities for workers and institute measures to prevent tracking out of any regulated material residue from the site.

2.6 Asbestos-Containing Materials

Cardno conducted a debris pile sampling event at the site in August 2020. Asbestos containing drywall and joint compound materials were identified mixed into the debris pile and is unable to be segregated from the rest of the debris. As such, the debris pile is considered to be asbestos-contaminated and must be removed. **Figure 1** provides the general location of the debris pile to be removed. The ACM summarized below are also provided in the attached **Bid Form**.

- Asbestos-contaminated C&D debris pile: 450 Cubic Yards (CY)

A detailed specification for the removal of ACM was prepared by Mr. Robert Hall of Cardno and is provided as **Section 3** of this Design. Mr. William Smithwick collected the asbestos bulk samples and a copy of his asbestos inspector certification is provided in **Appendix C**. A copy of Mr. Hall's Asbestos Project Designer Certification is also provided in **Appendix C**.

2.7 Demobilization

Following the abatement, the contractor shall visually confirm that all debris and residual materials have been removed from the concrete slab or underlying soil within the footprint of the debris pile. Any observed depressions must be backfilled with #57 stone or equivalent and appropriately compacted.

Upon completion of project activities to Owner's Representative approval, the Contractor will promptly demobilize equipment, tools, and personnel from the site. Equipment and tools will be decontaminated

as necessary prior to leaving the site. Personnel and vehicle decontamination stations will be properly cleaned and decommissioned. PPE and all wastes will be properly characterized, containerized, transported and disposed, as other wastes.

3 Asbestos Abatement Specification

3.1 Part 1 – General

3.1.1 Introduction

A. Description of Work

The following ACM have been identified by Cardno. All of these materials are to be removed as part of this environmental abatement project.

| <u>HA Name</u> | <u>Quantity/Area</u> | <u>Location</u> |
|---------------------------|----------------------|-----------------------------|
| • ACM-Contaminated Debris | 450 CY | Exterior North of Structure |

B. Abatement Methods

Methods of abatement are to be specified by the Contractor in their execution plan and approved of by the Owner's Representative. It is assumed that the entire abatement will be completed using heavy equipment under outdoor project techniques and best practices.

3.1.2 References

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

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z9.2 (1979; R 1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems

ANSI Z87.1 (1989; Errata; Z87.1a) Occupational and Educational Eye and Face Protection

ANSI Z88.2 (1992) Respiratory Protection

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 732 (1982; R 1987) Aging Effects of Artificial Weathering on Latex Sealant

ASTM D 522 (1992) Mandrel Bend Test of Attached Organic Coatings

ASTM D 1331 (1989) Surface and Interfacial Tension of Solutions of Surface-Active Agents

ASTM D 2794 (1990) Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)

ASTM D 4397 (1991) Polyethylene Sheeting for Construction, Industrial, and Agricultural Application

ASTM E 84 (1991A) Surface Burning Characteristics of Building Materials

ASTM E 96 (1993) Water Vapor Transmission of Materials

ASTM E 119 (1988) Fire Tests of Building Construction and Materials

ASTM E 736 (1986; R 1991) Cohesion/Adhesion of Sprayed Fire-Resistive Materials applied to Structural Members

ASTM E 1368 (1990) Visual Inspection of Asbestos Abatement Projects

CODE OF FEDERAL REGULATIONS (CFR)

CFR 29 Part 1910.1101 Occupational Safety and Health Standards

CFR 29 Part 1926 Safety and Health Regulations for Construction

CFR 40 Part 61 National Emission Standards for Hazardous Air Pollutants

CFR 40 Part 763 Asbestos

COMPRESSED GAS ASSOCIATION (CGA)

CGA G-7(1990) Compressed Air for Human Respiration

CFA G-7.1 (1989) Commodity Specification for Air

ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 340/1-90-018 (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance

EPA 340/1-90-019 (1990) Asbestos/NESHAP Adequately Wet Guidance

EPA 560/5-85-024 (1985) Guidance for Controlling Asbestos Containing Materials in Building

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10 (1990) Portable Fire Extinguishers

NFPA 70 (1993) National Electrical Code

NFPA 90A (1993) Installation of Air Conditioning and Ventilating Systems

NFPA 101 (1994) Safety to Life from Fire in Buildings and Structures

NFPA 701(1989) Methods of Fire Test for Flame-Resistance Textiles and Films

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH Pub No. 84-100 (9184; Supple 1985, 1987, 1988, 1990) NIOSH Manual of Analytical Methods

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

OREGON ADMINISTRATIVE RULES 340, DIVISION 248

UNDERWRITERS LABORATORIES (UL)

UL 586 (1990) High-Efficiency, Particulate, Air Filter Unit

3.1.3 Definitions

1. Abatement - Removal and proper disposal of asbestos-containing materials.
2. ACGIH - American Conference of Governmental Industrial Hygienists.
3. Adequately Wet - A term as defined in -CFR 40 Part 61-, Subpart M and -EPA 340/1-90-019-that means to sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from ACM, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wetted.
4. AIHA - American Industrial Hygiene Association.
5. Air lock - A system for permitting ingress and egress with minimum air movement between a contaminated area and uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least 3 feet such that one passes through doorway into the air lock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.
6. Air Monitoring - The process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure normally utilized for asbestos follows the NIOSH Method 7400. For clearance air monitoring, Transmission Electron Microscopy (TEM) methods when required, by the AHERA regulations will be used.
7. Air Sampling Professional - The professional contracted or employed by the Building Owner to supervise and/or conduct air monitoring and analysis schemes. This individual may also function as the Asbestos Consultant if qualified.
8. Amended Water - Water containing a wetting agent or surfactant with a surface tension of at least 29 dynes per square centimeter when tested in accordance with - ASTM 01331.
9. ANSI - American National Standards Institute.
10. Asbestos - the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite - grunerite (amosite), anthophyllite, actinolite, and tremolite.
11. Asbestos-Containing Material (ACM) - Material composed of asbestos of any type and in an amount greater than 1% by weight, either alone or mixed with other fibrous or non-fibrous materials.
12. Asbestos-Containing Waste Material - asbestos containing material or asbestos contaminated objects requiring disposal.
13. Asbestos Consultant – An individual qualified by virtue of experience and education, designated as the Owner's representative and responsible for overseeing the asbestos abatement project and collecting air samples when required. Individual is to be determined.
14. Asbestos Fibers - Asbestos fibers having an aspect ratio of at least 3:1 and 5 micrometers or longer in length.
15. ASTM - American Society for Testing and Materials.
16. Authorized visitor - The Owner (and any designated representatives) and any representative of

the regulatory or other agency having jurisdiction over the project.

17. Owner - The Owner or his authorized representative.
18. Category I Non-friable ACM - A term as defined in CFR Part 61 Subpart M and EPA 340/1-90-018 that means asbestos-containing packing, gasket, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in CFR 40 Part 763, Appendix A, Subpart F, Section 1, Polarized Light Microscopy.
19. Category II Non-friable ACM - A term as defined in CFR Part 61 Subpart M and EPA 340/1-90-018 that means any non-friable ACM material, excluding Category I non-friable ACM, containing more than 1 percent asbestos as determined using the methods specified in Category I Non-friable ACM.
20. Certified Industrial Hygienist - (CIH) - An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.
21. Class I Asbestos Work - (29 CFR 1926.1101) - Means activities involving the removal of TSI and Surfacing ACM and PACM.
22. Class II Asbestos Work - (29 CFR 1926.1101) - Means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles and constructions mastics.
23. Clean Room - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective equipment.
24. Contractor - The individual and/or business with which the Building Owner arranges to perform the asbestos abatement. It is recommended that wherever asbestos abatement is part of a larger project, the asbestos work be contracted separately and distinctly from other contract work. When this is not possible, the Contractor is responsible for the proper completion of project activities in accordance with this contract specification even where a subcontractor has been retained to perform the actual abatement.
25. Curtained doorway - A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway and securing the vertical edge of the other sheet along the opposite vertical side of the doorway. Other effective designs are permissible.
26. Decontamination enclosure system - A series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers and equipment.
27. Demolition - The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations.
28. Encapsulant - A liquid material which can be applied to asbestos-containing material which controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) components together (penetrating encapsulant).

29. Encapsulation - The application of an encapsulant to control the release of asbestos fibers into the air.
30. Enclosure - The construction of an air-tight, impermeable, permanent barrier around asbestos containing material to control the release of asbestos fibers into the air.
31. EPA - Environmental Protective Agency.
32. Equipment decontamination enclosure system - That portion of a decontamination enclosure system designed for controlled transfer of materials and equipment into or out of the work area, typically consisting of a washroom and holding area.
33. Equipment room - A contaminated area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.
34. Facility - Any institutional, commercial or industrial structure, installation, or building.
35. Facility component - Any pipe, duct, boiler, tank, reactor, turbine, or furnace at or in a facility or any structural member of a facility.
36. Fibers - All fibers regardless of composition as counted in the NIOSH 7400 procedure.
37. Fixed object - A piece of equipment or furniture in the work area which cannot be removed from work area.
38. Friable ACM - A term as defined in CFR 40 Part 61, Subpart M and EPA 340/1-90-018 that means any material containing more than 1 percent asbestos as determined using the method specified in CFR 40 Part 763, Appendix A, Subpart F, Section 1, Polarized Light Microscopy, that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
39. Glovebag technique - A method with limited applications for removing small amounts of friable asbestos containing material from HVAC ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces in a non-contained (plasticized) work area. The glovebag assembly is a manufactured or fabricated device consisting of a 6-mil transparent polyethylene or polyvinylchloride plastic bag with two inward projecting long-sleeves and an internal tool pouch.

The glovebag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all asbestos fibers released during the process. All workers who are permitted to use the glovebag technique must be highly trained, experienced, and skilled in this method.
40. HVAC – heating, ventilation, and air conditioning system.
41. HEPA filter - A high efficiency particulate air filter capable of removing particles as small as 0.3 microns in diameter with 99.97% efficiency.
42. HEPA vacuum - A vacuum system equipped with HEPA filtration.
43. Holding area - A chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.

44. Movable object - A piece of equipment or furniture in the work area which can be removed from the work area.
45. Negative pressure ventilation system - a portable exhaust system equipped with HEPA filtration and capable of maintaining a constant low velocity air flow from contaminated areas into adjacent uncontaminated areas post-filtration.
46. NESHAP - The National Emission Standard for Hazardous Air Pollutants (40 CFR Part 61).
47. NIOSH - The National Institute for Occupational Safety and Health.
48. Non-friable ACM - A term as defined in CFR Part 61 Subpart M and EPA 340/1-90-018 that means any material containing more than 1 percent asbestos as determined using the method specified in CFR 40 Part 763, Appendix A, Subpart F, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.
49. OSHA - The Occupational Safety and Health Administration.
50. Outside air - The air outside buildings and structures.
51. Plasticize (polyethylene) - To cover floors and walls with plastic sheeting as herein specified.
52. Prior experience - Experience required of the contractor on asbestos projects of similar nature and scope to insure capability of performing the asbestos abatement in a satisfactory manner. Similarities will be in areas related to material composition, project size, abatement methods required, number of employees and the engineering, work practice and personal protection controls required.
53. Removal - The stripping of any asbestos-containing materials from surfaces or components of a facility.
54. Renovation - Altering of facility components. Operations in which load-supporting structural members are wrecked or taken out are excluded.
55. Shower room - A room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination.
56. Staging area - Either the holding area or some area near the waste transfer air lock where containerized asbestos waste has been placed prior to removal from the work area.
57. Strip - To remove asbestos materials from any part of facility.
58. Structural member - Any load-supporting member of a facility, such as beams and load-supporting walls or any non-load-supporting member, such as ceilings and non-load supporting walls.
59. Surfactant - A chemical wetting agent added to water to improve penetration.
60. Time-Weighted Average (TWA) - The TWA is an 8-hour time weighted average of airborne concentration of fibers (longer than 5 micrometers) per cubic centimeter of air which represents the employee's 8-hour workday as determined by Appendix A of CFR 29 Part 1926.1101.
61. Visible emissions - Any emissions that are visually detectable without the aid of instruments. This

does not include condensed uncombined water vapor.

- 62. Waste transfer air lock - A decontamination system utilized for transferring containerized waste from inside to outside of the work area.
- 63. Wet cleaning - The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with amended water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.
- 64. Work area - Designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized nor equipped with a decontamination enclosure system.
- 65. Worker decontamination enclosure - A decontamination system consisting of a clean room, a shower room, and an equipment room separated from each other and from the work area air locks and contained doorways.

3.1.4 Contractor Responsibilities

A. General

The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to work practices, preparation for hauling, protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations. The Contractor shall hold the Owner and Owner's Representative harmless for failure to comply with any applicable work, hauling, disposal, safety, health, or other regulation on the part of himself, his employees, or his subcontractors.

B. Training/Licensing

The Contractor shall insure that all employees of the Contractor who will be performing asbestos removal activities have been provided with training that meets or exceeds the requirements found in the applicable OSHA standards, especially the standard for asbestos (29 CFR 1926.1101). A copy of all required business licenses, training certificates, and personal licenses must be kept on site at all times during work activities.

Additionally, all workers must comply with specific training that may be required by the general contractor.

C. Medical Requirements

The Contractor shall ensure that all employees of the Contractor who will be performing asbestos removal activities will have been provided with a medical examination that meets or exceeds the requirements found in the applicable OSHA standards, especially the standard for asbestos (29 CFR 1926.1101). Further, the Contractor shall insure that all medical records developed pursuant to the above requirements will be maintained according to the applicable OSHA standards, especially the standard for asbestos (29 CFR 1926.1101).

D. Respiratory Protection Program

The Contractor shall establish and maintain an effective respiratory protection program that meets or exceeds the requirements found in the applicable OSHA standards, especially the standard for asbestos (29 CFR 1926.1101) and the standard for Respiratory Protection (29 CFR 1910.114).

E. Regulatory Compliance

The Contractor shall comply with all applicable environmental, health and safety regulations as promulgated by appropriate Federal, State or local regulatory authority. In particular, the Contractor is required to comply with all sections of the OSHA standard for Occupational Exposure to Asbestos as found in 29 CFR 1926.1101; and the NESHAP regulations as found in 40 CFR Part 61.

F. Notice to Asbestos Consultant

The Contractor is required to provide at least 24-hour notice to the Asbestos Consultant to allow for the following:

1. Inspection of the work area prior to beginning removal of ACM.
2. Final visual inspection.

G. Notice to Regulatory Agencies

A permit application and notification must be prepared for this project and submitted by the Contractor to the Oregon Department of Environmental Quality. Remediation work will not begin until at least 10 days after the submission date.

H. Electrical Requirements

The Contractor is responsible for all electrical requirements needed to perform the work as described in the specifications. All the Contractor's electrical equipment must be connected to a ground fault protected panel.

I. Abatement Area Security

1. The work area is restricted to authorized, trained, and protected personnel. These may include the Contractor's employees, employees of Subcontractors, Owner's employees and representatives, state and local inspectors and any other designated individuals. A list of authorized personnel must be established prior to job start.
2. Entry into the work area by unauthorized individuals will be reported immediately to the Asbestos Consultant by the Contractor.
3. A sign-in log must be maintained by the asbestos project supervisor. Anyone who enters the work area must record name, affiliation, time in, and time out for each entry.
4. Access to the work area will be through a single point in the demarcation area. The only exception for this rule is in the event of an emergency, such as fire or accident.
5. The Contractor shall provide work area security during abatement operations.

3.1.5 Owner Responsibilities

It is the responsibility of the Owner to provide the following:

1. Access to the work area at the scheduled work times and such other times as mutually agreed upon.

3.1.6 Job Conditions

A. Conditions of Work Area

The Owner assumes no responsibility for the actual condition of the work area.

B. Damage

Work will be completed within and adjacent to historic structures. The contractor must exercise care so as not to damage or otherwise harm the historic integrity of the Site structures.

C. Utilities

The Contractor shall make arrangements for all water, electricity, and other utilities necessary in the area of operations. The Contractor shall provide his own temporary lighting in the area of operations, if required.

D. Safety

Ensure safe passage of persons around area of abatement. Conduct operations to prevent injury or damage to facilities and persons. Local medical emergency personnel, both ambulance crews and hospital emergency room staff, must be notified as to the possibility of having to handle contaminated, injured persons and be advised on safe decontamination procedures.

E. Security

The Contractor shall secure the demarcated work area to keep unauthorized personnel from accidentally entering the area in which asbestos is being removed.

F. Containment Log

The Contractor shall maintain a log of entry to the demarcated area. The log must be signed by every person that enters the secured area. A copy of this log will be made available to the Asbestos Consultant for all on-site visits.

G. Visitor Protection

All persons entering the work area must wear PPE required for the Site and the work area. There will be no exceptions to this requirement.

H. Daily Report

The Contractor shall maintain for the benefit of the Owner, a daily report which must include, but not be limited to, hours of work, size of crew, work type and progress, special conditions encountered, and any other information appropriate to fully describe the job conditions.

I. Contractor Representative

The Contractor shall name an individual at the job site who will be in charge of the Contractor's activities on the job site. The individual named will be the principal point of contact on the job site for representatives of the Owner and the Asbestos Consultant and will be empowered to take corrective actions if activities are found to be in violation of the specification. The individual must remain at the job site as long as any aspect of the work required is in progress.

J. Storage of Equipment and Supplies

Storage of Contractor equipment must meet the approval of the Owner and the Asbestos Consultant

K. Contractor Use of Premises

1. The Contractor will limit his use of the premises to the work indicated and confine operations to

- the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed.
2. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials to the approved areas.
 3. Keep existing driveways and entrances serving the premises clean and available to the Owner at all times. Do not use these areas for parking or storage of materials.
 4. Lock automotive type vehicles, such as passenger cars and trucks and other mechanized or motorized construction equipment, when parked and unattended, so as to prevent unauthorized use.
 5. Maintain existing area in a safe condition throughout operations.

3.1.7 Personnel

A. General Superintendent:

Provide a full-time General Superintendent who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for environment and personnel, disposal procedures, etc. This person is the Competent Person and is the Contractor's representative, responsible for compliance with all applicable Federal, State, and local regulations, particularly those relating to asbestos-containing materials. This person must have completed a course at an EPA Training Center or equivalent certificate course in asbestos abatement procedures, have had a minimum of five years on-the-job training and meet any additional requirements set forth in 29 CFR 1926 for a Competent Person. In addition, the Contractor shall have a Oregon accredited Supervisor present whenever abatement or waste loading operations is taking place. The superintendent may act as the supervisor.

B. Competence of Workmen

If any employee of the Contractor, in the opinion of the Owner or the Asbestos Consultant is careless in the execution of the work or is otherwise objectionable or unacceptable in his performance must be removed upon request of the Owner, Asbestos Consultant, or their representative.

C. Crews

The Contractor shall provide work crews in sufficient numbers to complete all asbestos removal operations according to the agreed upon schedule.

D. Conduct of Workmen

No alcoholic beverages or drugs will be permitted on Site grounds. All soft drink bottles, wrappers, etc., are to be removed each day. This work site will also be non-smoking, with the exception of a designated and approved smoking area. All debris and waste from smoking must be removed on a daily basis.

3.1.8 Emergency Planning

The Contractor shall adhere to the existing health and safety plan and emergency action plan at all times while on site. Emergency planning must include considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, trips and falls, confined spaces and weather/temperature related injury. Written procedures and employee training in procedures must be provided.

Employees will be trained in evacuation procedures in the event of a workplace emergency.

1. For non-life-threatening situations, employees injured must decontaminate following normal procedures with assistance from fellow workers if necessary before exiting the workplace to obtain proper medical treatment.

2. For life-threatening injury or illness, worker decontamination will take least priority after measures to stabilize the injured worker, remove him from the workplace and secure proper medical treatment.

3.1.9 Authority to Stop Work

ALL PERSONNEL will have the authority to temporarily stop work because of unsafe work practices, non-adherence to the Specification, or breach of containment. Written notice will be given to the Contractor stating the reason(s) for the action taken. Work will resume when the cause of the stop work action has been eliminated. The Contractor's completion clock will continue to run despite any work stoppage.

3.1.10 Agreement to Pay Fines

The Contractor agrees to pay any fines levied by any Federal, State or local agency against the Owner and the Asbestos Consultant for any violations by the Contractor or the Contractor's personnel.

3.1.11 Hold Harmless Agreement

The Abatement Contractor shall indemnify, hold harmless, and defend the Owner, Project Designer, and Consultant, partial or wholly Owner entities, and any of their agents, employees, or officers (collectively referred to as releases) from, and against, any and all losses, claims, judgments, including legal fees and expenses of any, and every, nature and description brought or recoverable against Abatement Contractor or releases by reason of any act, intentional or otherwise, or employees, arising directly, or indirectly, from the nature of the work covered by this agreement, including but not limited to, the removal and disposal of any regulated material.

3.2 Part 2 – Procedures Prior to Starting Abatement

3.2.1 Post Warning Signs and Establish Regulated Area

Warning signs will be posted at all entrances to and exits from the work area. These signs will conform to 29 CFR 1926.1101(k)(6).

3.2.2 Decontamination Facilities

A. Work Decontamination Facility

Decontamination facilities will be constructed in such a manner as to provide workers and/or equipment within which to decontaminate themselves upon leaving the work area. The decontamination chamber will be constructed using 6-mil polyethylene sheeting and appropriate construction materials. The decontamination facility must meet the following criteria as a minimum:

The exterior of the unit must be covered in 5/8" plywood. There will be a minimum of three chambers separated by air locks; (1) an equipment room where workers remove gross contamination and discard disposable suits; (2) a "single pass-through" shower (no shower may be used which can be passed by any person entering into or exiting from the work area); and (3) a clean (change) room where workers dress and undress. The shower must be supplied with hot and cold water as well as soap. Clean, dry towels must be available at the exit from the shower. The water from the shower must be filtered in accordance with EPA requirements or disposed of as contaminated waste. Separating each chamber and air lock will be triple curtains of polyethylene.

The decontamination unit will likely be a remote unit as this is an unoccupied area.

B. Equipment Decontamination/Waste Load-out

Equipment will be decontaminated utilizing wet methods. All waste created during the decontamination process will be disposed of as asbestos-contaminated. All materials used in the construction of a decontamination pad and the water used for decontamination must be treated as asbestos-contaminated materials.

Waste will be directly loaded into properly lined containers or staged adjacent to the designated removal area on 6-mil polyethylene sheeting. Containers will be properly wrapped in accordance with USEPA and NESHAP Disposal Requirements and will be HEPA-vacuumed, if necessary, prior to transportation.

3.2.3 Segregation of Work Areas – Gross Removal Areas

A. Isolation of Work Area

The Contractor shall isolate the entire work area for the duration of the abatement using barrier tape.

B. Protection of Existing Structure

NOT APPLICABLE

3.2.4 Preparation of Work Area for Abatement

A. Equipment

Provide all equipment necessary to accomplish the work of this contract. All equipment used will comply with all applicable OSHA provisions.

B. Water

Contractor must provide their own tank, water, and water amendments for their use. If required, the contractor shall provide their own backflow protection. Valves must be temperature and pressure rated for operation at the temperatures and pressures encountered. After completion of use, connections and fittings must be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves must be piped to the nearest drain or located over the existing sink or grade where water will not damage existing finishes or equipment.

Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each work area and to each Decontamination Unit. Provide fittings as required to allow for connection to existing wall hydrants or spouts, as well as temporary water heating equipment, branch piping, showers, shut-off nozzles and equipment.

C. Electrical

Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electrical service.

The Contractor must provide power to the site for their own use when required. The Contractor will provide a ground fault protected power panel that will be connected to the power source

Provide identification warning signs at power outlets which are other than 110-120-volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets. Dry type transformers must be used where required to provide voltages necessary for work operations.

Receptacle outlets equipped with ground fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.

Use only grounded extension cords: use “hard-service” cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electrical cords, if single lengths will not reach areas of work.

Provide general service lamps and bulbs of wattage indicated or required for adequate illumination. Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide exterior fixtures where fixtures are exposed to the weather or moisture.

D. Sanitary Facilities

The Contractor must provide temporary sanitary facilities and shower facilities for all workers.

E. Fire Extinguishers, Portable

Comply with the applicable recommendations of NFPA Standard 10, “Standard for Portable Fire Extinguishers.” Locate fire extinguishers where they are most convenient and effective for their extended purpose. As a minimum, there must be one extinguisher in each work area, one in the equipment area, and one located immediately outside the work area near the Decontamination Unit.

F. Adhesives

Where tape is used, it must be a high-quality duct tape, masking tape, or vinyl plastic tape. Where spray glue (cement) is used, it must be specifically formulated for use on polyethylene.

3.2.5 Isolation and Shutdown of Building HVAC System

NOT APPLICABLE

3.2.6 Negative Pressure Establishment and Maintenance

NOT APPLICABLE

3.3 Part 3 – Procedures for Friable Asbestos Abatement

3.3.1 Entry and Exit from Work Area

A. Work Area Entry

Entry into the work area must be conducted by a pre-arranged pathway. As an outdoor project likely using a remote decontamination unit, all workers must don two layers of required protective clothing, i.e. disposable whole-body suits, head covering, respirator, and shoe covers then proceed directly to the work area.

Contractor shall provide all required items for workers’ protection to meet applicable OSHA and/or EPA standards.

B. Work Area Exit

All persons exiting from the work area must thoroughly decontaminate themselves to prevent the tracking out of ACM and contamination to non-contained areas. Therefore, as a minimum, the following procedure is to be followed:

1. Remove top layer of disposable protective clothing at the edge of the work area. Leave respirator on.
2. Remove bottom layer of disposable clothing in the equipment room. Leave respirator on.
3. Take shower, washing with soap and water.
4. Rinse hair with running water.

5. Remove respirator, wash hair.
6. Wash out respirator.
7. Exit into clean room to dry off and dress into street clothes.

It is the Contractor's responsibility to insure their personnel follow the above procedure and that ACM is not tracked outside the containment.

3.3.2 Respiratory Protection during Asbestos Removal

The Contractor will commence with the gross removal of asbestos in the work area in Type "C" supplied air respirators that are supplied with air of a Grade D quality or powered air purifying respirators (PAPR) in accordance with 29 CFR 1926.1101, UNLESS the Contractor can provide evidence to the Asbestos Consultant that airborne fiber levels can be maintained in such a manner to permit the use of lesser respiratory protection equipment. This evidence will consist of personnel air monitoring data from other projects involving the removal of similar types of materials using procedures similar to those to be used in this project. In any event, it is the responsibility of the Contractor to adequately protect his personnel in the work area and to comply with all applicable OSHA regulations.

All respiratory protection equipment to be used in the conduct of this project is to be NIOSH certified. Each worker will have a respirator personally issued and marked for his use only. The minimum type of respirator will be a half-face dual HEPA cartridge. NO RESPIRATOR OTHER THAN THIS TYPE (unless of a higher protection factor) WILL BE PERMITTED ON THE JOBSITE.

3.3.3 Work Practices

All work practices followed will be consistent with the OSHA standard on Occupational Exposure to Asbestos (29 CFR 1926.1101). In particular, the following work practices will be followed:

1. Workers shall not eat, drink, smoke, chew gum or chew tobacco in the work area, the decontamination unit, or the waste load-out area.
2. Workers shall always wear their respirators while inside the work. Failure to wear the appropriate respirator can result in worker removal from the jobsite

3.3.4 Asbestos Removal Procedures – General

1. All asbestos removal work will be performed in accordance with the requirements of the OSHA standard on Occupational Exposure to Asbestos (29 CFR 1926.1101) and OAR 340, Division 248.
2. All items interfering with abatement must be removed and decontaminated before being disposed of.
3. The Contractor will use wet methods to remove the ACM. The water used to wet the materials will be amended with a suitable wetting agent of 50% polyoxyethylene ester and 50% polyoxyethylene ether. Only airless or other low-pressure sprayers may be used to apply the amended water in a "mist." While this is a wet removal, excessive amounts of water will not be permitted to stand on the ground or within containments.
4. All removed ACM is to be promptly contained in 6-mil labeled polyethylene bags or wrapped in 6-mil polyethylene sheeting and then labeled. Removed ACM is not to remain onsite for excessive periods where it can dry out. Containers are not to be overfilled. As containers are filled and sealed, they are to be transported from the site as soon as possible.
5. All polyethylene, tape, cleaning materials, work clothing, and all other items used in the work area that cannot be completely decontaminated will be disposed of as asbestos-contaminated waste. These materials must be double-bagged in 6-mil polyethylene labeled bags and handled in the same manner as the removed ACM.

3.3.5 Asbestos Removal Procedures – Detailed

A. Asbestos-contaminated C&D Debris Pile.

1. Post warning signs.
2. Establish a Regulated Area with barrier tape.
3. The Contractor is required to submit their abatement means and methods as part of the Execution Plan for approval by the Owner or Owner's Representative. The plan must specify how the regulated materials are to be removed, what containments are proposed, or if localized containment is planned (e.g. burrito wrap roll-off containers).
4. Prepare containers utilizing methods specified in USEPA CFR 61.145 - Standard for Demolition and Renovation. Lay down 6-mil polyethylene around designated containers so that material being removed/loaded will not contact non-contaminated ground.
5. Immediately wrap debris containers as they are filled to completion; do not let material accumulate and remain un-covered. The containers will be properly sealed in accordance with USEPA CFR 61.145 - Standard for Demolition and Renovation as they are filled and then promptly removed from the site for disposal.
6. Once the abatement is complete, the Contractor shall call for a visual inspection of the work area. See section 3.3.6 B for additional details.

3.3.6 Clean Up Procedures

A. General

All work is to be done in a professional manner and to the satisfaction of the Asbestos Consultant and Owner. All non-contaminated areas are to be protected. Cleaning supplies and equipment are to be furnished by the Contractor.

B. Clean-up Procedure

1. When the gross removal of the ACM has been completed, the Contractor will then begin the process of gross clean-up. The Contractor will clean all surfaces where asbestos-contaminated soil and potential ACM residual materials remain (such as the underlying concrete slab or soil). Upon completion of gross cleaning, the Contractor will begin fine cleaning.
2. The Contractor will then clean all physical surfaces a second time. On completion of the fine cleaning, a visual inspection will be performed by the Asbestos Consultant or his designee. The work area must be completely free of any visible asbestos dust, debris, etc. If not, the area must be completely re-cleaned at the Contractors expense.

C. Equipment Decontamination

Equipment, machinery, tools, etc., used within the work area will not be removed without first being thoroughly cleaned with amended water. An equipment decontamination pad may be necessary to fully clean any heavy equipment (i.e. lifts, loaders, etc.) that might be used during abatement. Materials used to construct a decontamination pad and water used to decontaminate equipment must be treated as asbestos-contaminated materials.

3.3.7 Air Monitoring

A. General

Asbestos air monitoring will be completed along the perimeter of the work area to ensure that proper dust suppression techniques are used. Analysis of asbestos air samples will be completed by PCM by a qualified laboratory or properly trained and certified personnel. Asbestos air sampling will be conducted while all abatement work is occurring. Final clearance asbestos air samples will be

collected following final visual clearance by an asbestos inspector and approval by Owner, Owner's Representative, or the Asbestos Consultant. The air samples will be collected by a qualified asbestos air sampling technician. Analysis of air samples will be completed by a certified laboratory and/or a qualified and accredited PCM analyst.

Asbestos air monitoring reports will be provided to the Owner within 48-hours of collection with the daily report.

B. Airborne Fiber Levels

If an air sample concentration exceeds the average background fiber count as determined by the Asbestos Consultant or 0.01 f/cc, whichever is greater, then the Asbestos Consultant or his designee may stop work and require additional engineering controls used to suppress dust. The Contractor will be responsible for any additional controls required to maintain airborne fiber levels below the identified limit. TEM may be used to re-analyze an exceeded sample if the PCM analyst believes the fiber count to be elevated due to potential non-asbestos fibers.

3.3.8 **Disposal of Asbestos Waste**

A. General

1. All asbestos and asbestos-contaminated waste must be sealed in approved containers in accordance with USEPA CFR 61.145 Standard for Demolition and Renovation. The containers are to be labeled, transported and disposed of in accordance with the applicable OSHA and EPA Regulations. At the conclusion of the job, all polyethylene material will be disposed of as asbestos-contaminated waste material.
2. Only an approved and licensed asbestos waste hauler will be permitted to remove the material from the jobsite and transport it to the landfill. The Contractor will be responsible for transportation of the material to the landfill, and the submission of receipts from the landfill to the Asbestos Consultant as evidence that the material was disposed of in an approved manner. The Owner must receive the final landfill tickets.

B. Waste Disposal Site

1. The Owner will be responsible for obtaining prior approval for a disposal site for the asbestos waste in compliance with the latest ODEQ and USEPA regulations.
2. The Owner shall strictly adhere to all precautions necessary for the safety and health of the workmen in accordance with the latest version of the applicable OSHA and USEPA Regulations, especially 29 CFR 1926.1101.

C. Transportation

All asbestos materials must be carried directly to the previously approved asbestos landfill. The Contractor will contact the landfill to make arrangements regarding the time of the dump operation.

D. Alternate Methods

Alternate handling and packaging systems for the debris that maintain the integrity of the disposal systems will be considered by the Asbestos Consultant.

E. Burning

Burning of materials from the abated area will not be permitted.

F. General Debris

All trash and debris are to be removed from the property by the Contractor daily.

G. Wastewater

Wastewater may be disposed of by filtering the asbestos-contaminated water in accordance with USEPA regulations, then disposing of the filtered water in a sanitary sewer system. Wastewater that is not filtered cannot be placed into the public sewer system or disposed of in a location other than an approved disposal site.

All wastewater from the shower and/or any sinks must be disposed of in a manner similar to that of solid waste materials previously specified in this Section.

4 References

- AHERA regulations: <https://www.epa.gov/asbestos/asbestos-and-school-buildings>
- NESHAP regulations: <https://www.epa.gov/asbestos/overview-asbestos-national-emission-standards-hazardous-air-pollutants-neshap>
- OSHA asbestos regulations: <https://www.osha.gov/SLTC/asbestos/>
- DOL website: <https://www.dol.gov/whd/regs/compliance/whdfs66.pdf>.
- OAR 340, Division 248 – Asbestos Requirements

Bid Form



now



| BID FORM | | | | |
|---|----------|---------------------|-----------|-------|
| FORMER MARKWARDT BROTHERS SITE | | | | |
| 112 W CHOCKTOOT STREET, CHILOQUIN, OREGON 97624 | | | | |
| BUILDING DEBRIS PILE REMOVAL - SCOPE OF WORK | | | | |
| Company: | | | | |
| Address: | | | | |
| Authorized Representative: | | | | |
| Signature: | | | | |
| Cell Number: | | | | |
| Email: | | | | |
| LUMP SUM PRICES | | | | |
| | Quantity | Units | Cost (\$) | Notes |
| 1.) Project Submittals - Execution Plan, HASP, Traffic Plan | 1 | LS | \$ | |
| 2.) Project Management, Permits, Notifications, Completion Report | 1 | LS | \$ | |
| 3.) Project Mobilization and Demobilization | 1 | LS | \$ | |
| 4.) ACM-Contaminated Pile Removal & Disposal (up to 450 CY) | 1 | LS | \$ | |
| 5.) Site Restoration | 1 | LS | \$ | |
| LUMP SUM SUBTOTAL | | | \$ | |
| REMOVAL AND DISPOSAL DETAILS | | | | |
| | | | | |
| ASBESTOS | | | | |
| ACM-Contaminated Building Debris Pile | 450 | CY | | |
| SITE RESTORATION | | | | |
| Grade Area to Match Slab, Clean Slab, Fill Depressions with #57 Stone or Equivalent (up to 2 CY of Fill Material) | <1 | Acre | | |
| TIME AND MATERIAL COSTS | | | | |
| Additional ACM-Contaminated Building Debris Removal and Disposal | 1 | CY | | |
| Additional #57 Stone or Equivalent Fill Material | 1 | CY | | |
| SCHEDULE: | | | | |
| 1.) Project Submittals - Execution Plan, HASP, Traffic Plan | | working days | | |
| 2.) Project Management, Permits, Notifications, Completion Report | | working days | | |
| 3.) Project Mobilization and Demobilization | | working days | | |
| 4.) ACM-Contaminated Pile Removal & Disposal | | working days | | |
| 5.) Site Restoration | | working days | | |
| Total Project Duration | | working days | | |
| PROJECT ASSUMPTIONS | | | | |
| Contractor is responsible for all removal, packaging, manifesting, transportation, and disposal of all ACM-contaminated materials and any other waste referenced in the Scope of Work. | | | | |
| All permits, certifications, fees, notifications etc. required to complete the Scope of Work are to be prepared and paid by Contractor. | | | | |
| All submittals will be reviewed by the Owner and/or Owner's consultant for approval. No additional fees will be provided for corrections to submittals. | | | | |
| Contractor is responsible for the completion of referenced tasks. No additional fees will be paid for re-cleaning insufficient work. | | | | |
| Contractor is responsible for personnel air monitoring as required by Federal, State and local regulations. | | | | |
| Contractor is responsible for all equipment, materials, and PPE as necessary for the performance of the work. | | | | |
| Contractor is responsible for preparing a health and safety plan that incorporates all regulatory requirements as well as requirements of the primary contractor, when applicable. | | | | |
| Contractor is responsible for providing all safety equipment required to perform the specified work. | | | | |
| Contractor is responsible for all temporary utilities (water, electricity, personnel facilities, etc.) and associated fees required to perform the specified work. | | | | |
| It is assumed that the scope of work will be completed during one mobilization and the contractor will have unimpeded access to the work areas. Coordination may be required with the City/Town for potential full or partial road closure. | | | | |
| By virtue of the authorized signature on this bid form, the bidder affirms that he/she/they will comply with all conditions stated in the project design documents and all attachments. | | | | |

Tables



now



TABLE 1: SUMMARY OF BULK SAMPLE ANALYSIS
FACILITY NAME: FORMER MARKWARDT BROTHERS GARAGE
CHILOQUIN, KLAMATH COUNTY, OREGON

| HA ID | Date | HA Description | Material Location | Percent and Type of Asbestos Detected ¹ | Estimated Quantity | Type of ACM ² | Friability ³ | Physical Condition |
|------------------|----------------|---|----------------------------|--|--------------------|--------------------------|-------------------------|--------------------|
| RP-01-01 | 8/18/21 | Shingles | Rubble pile (east) | NAD | N/A | N/A | NF | Poor |
| RP-01-02 | 8/18/21 | Shingles | Rubble pile (north) | NAD | N/A | N/A | NF | Poor |
| RP-02-01a | 8/18/21 | Drywall (White texture w/ paint) | Rubble pile (west) | 2% CH | 450 CY | Misc. Cat 1 | F | Poor |
| RP-02-01b | 8/18/21 | Drywall (Cream tape) | Rubble pile (west) | NAD | N/A | N/A | F | Poor |
| RP-02-01c | 8/18/21 | Drywall (White joint compound) | Rubble pile (west) | 2% CH | 450 CY | Misc. Cat 1 | F | Poor |
| RP-02-01d | 8/18/21 | Drywall (White drywall w/ brown paper) | Rubble pile (west) | NAD | N/A | N/A | F | Poor |
| RP-02-02a | 8/18/21 | Drywall (Cream tape) | Rubble pile (north) | NAD | N/A | N/A | NF | Poor |
| RP-02-02b | 8/18/21 | Drywall (White joint compound) | Rubble pile (north) | 2% CH | 450 CY | Misc. Cat 1 | F | Poor |
| RP-02-02c | 8/18/21 | Drywall (White drywall w/ brown paper) | Rubble pile (north) | NAD | N/A | N/A | NF | Poor |
| RP-03-01 | 8/18/21 | Gray caulk | Rubble pile (west) | NAD | N/A | N/A | NF | Poor |
| RP-03-02 | 8/18/21 | Gray caulk | Rubble pile (east) | NAD | N/A | N/A | NF | Poor |

Notes:

(1) CH = Chrysotile; AM = Amosite; CR = Crocidolite; AN = Anthophyllite; AC = Actinolite; NAD = No Asbestos Detected

(2) Misc = Miscellaneous; TSI = Thermal System Insulation; SM= Surfacing Material

(3) F = Friable; NF - Non friable. For ACMs only: I = Non-Friable Category I; II = Non-Friable Category II

NM - not measured

LF = linear feet

PACM = Presumed Asbestos-Containing Materials

n/a - not applicable

SF = square feet CY = Cubic Yards

TABLE 2: SUMMARY OF TCLP LEAD SAMPLES
FACILITY NAME: FORMER MARKWARDT BROTHERS GARAGE
CHILOQUIN, KLAMATH COUNTY, OREGON

| Sample ID | Date | Location | Result | Estimated Quantity | Physical Condition |
|-----------|---------|--------------------|--------|--------------------|--------------------|
| RP-01 | 8/18/21 | Rubble pile (east) | BRL | N/A | Deteriorated |
| RP-02 | 8/18/21 | Rubble pile (west) | BRL | N/A | Deteriorated |

Notes:

NM - not measured

n/a - not applicable

BRL = Below Laboratory Reporting Limit

Figures



now



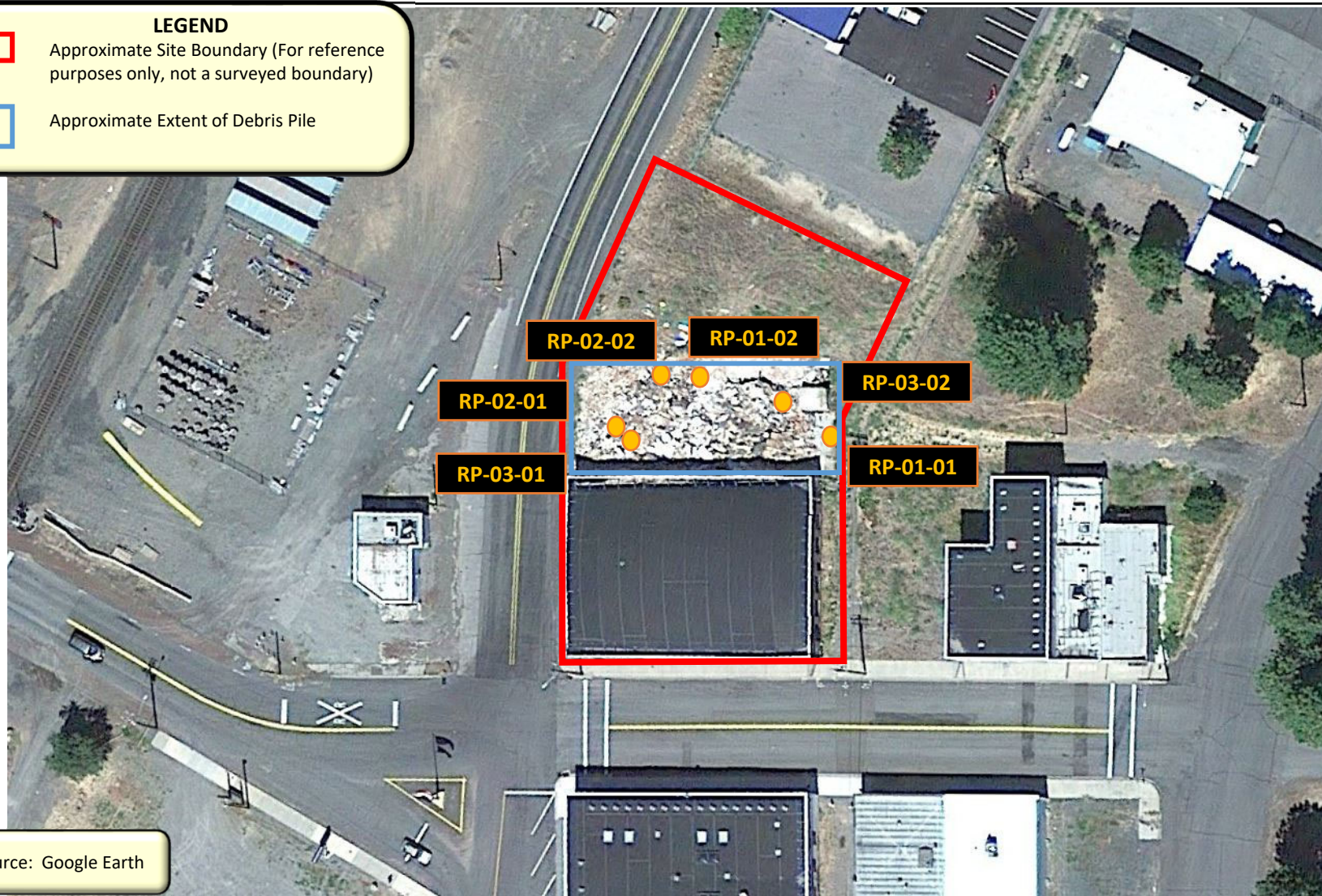
LEGEND



Approximate Site Boundary (For reference purposes only, not a surveyed boundary)



Approximate Extent of Debris Pile



Source: Google Earth



"This is not a map of survey."



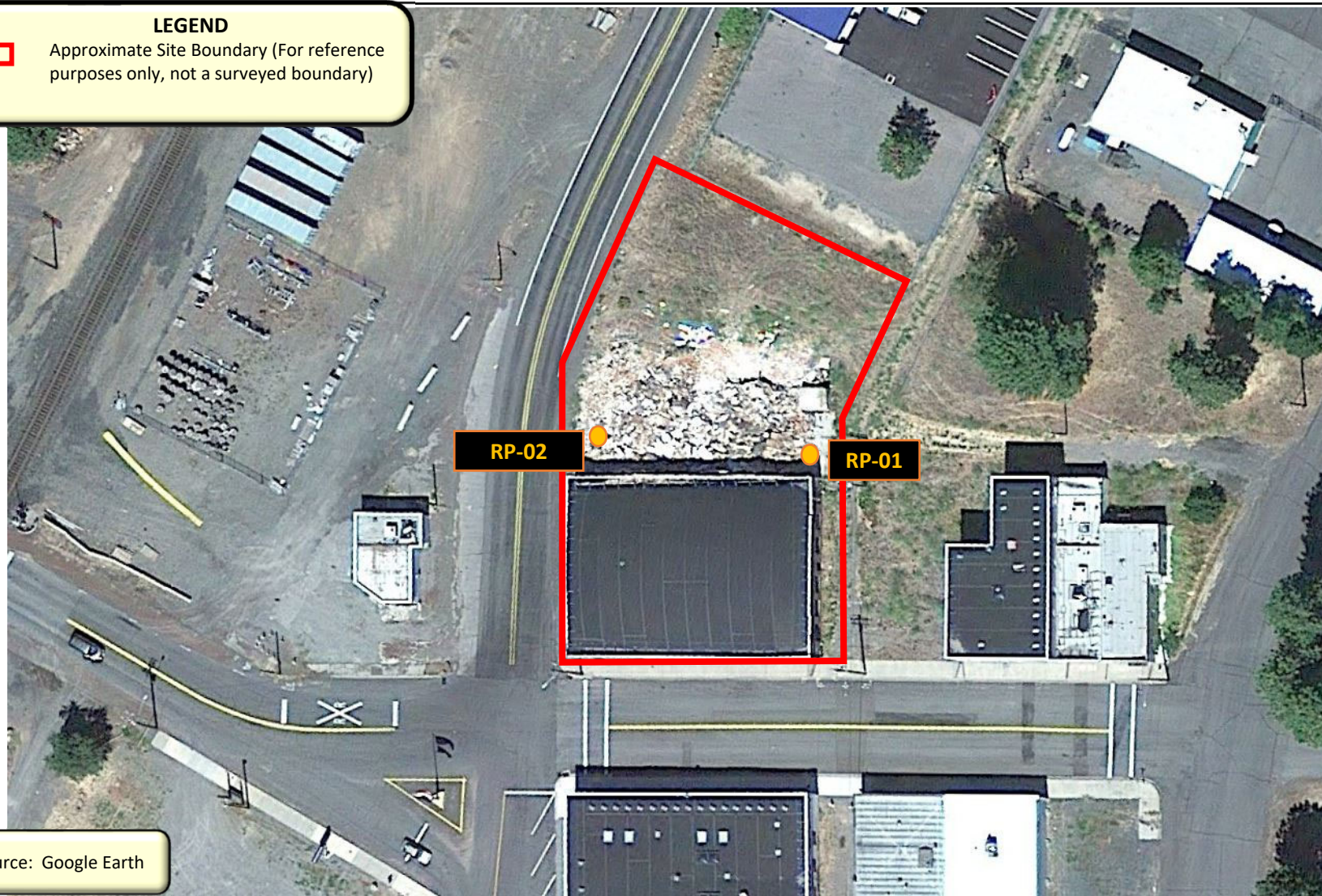
Debris Characterization
Former Markwardt Brothers Garage
Chiloquin, Klamath County, Oregon
Cardno Project # CHILOQ100

Figure 1
ACM Sample
Location Map

LEGEND



Approximate Site Boundary (For reference purposes only, not a surveyed boundary)



Source: Google Earth



"This is not a map of survey."



30 0 30

Debris Characterization
Former Markwardt Brothers Garage
Chiloquin, Klamath County, Oregon
Cardno Project # CHILOQ100

Figure 2
TCLP Sample
Location Map

Appendix A

Photographic Log



now



PHOTOGRAPHIC LOG



Client Name: City of Chiloquin, OR

Site Location: Former Markwardt
Brothers Garage, Chiloquin, Oregon

Facility #: TBD

Photo No.
1

Date:
1/28/2022

Direction Photo Taken:

West

Description:

Debris Pile



Photo No.
2

Date:
1/28/2022

Direction Photo Taken:

South

Description:

Debris Pile



PHOTOGRAPHIC LOG



Client Name: City of Chiloquin, OR

Site Location: Former Markwardt
Brothers Garage, Chiloquin, Oregon

Facility #: TBD

Photo No.
3

Date:
1/28/2022

Direction Photo Taken:

South

Description:

Debris Pile



Photo No.
4

Date:
1/28/2022

Direction Photo Taken:

East

Description:

Debris Pile – Detailed View of
Materials



PHOTOGRAPHIC LOG



Client Name: City of Chiloquin, OR

Site Location: Former Markwardt
Brothers Garage, Chiloquin, Oregon

Facility #: TBD

Photo No.
5

Date:
4/1/2021

Direction Photo Taken:

East

Description:

Debris Pile with underlying
concrete slab and vault shown.



Photo No.
6

Date:
4/1/2021

Direction Photo Taken:

South

Description:

Debris Pile – Eastern side of the
debris pile



Appendix B

Laboratory Analytical Reports



now



Report for:

W. Ashton Smithwick
Cardno
6611 Bay Circle Suite 220
Norcross, GA 30071

Regarding: Project: CH860Q100
 EML ID: 2718074

Approved by:



Approved Signatory
Balu Krishnan

Dates of Analysis:
Asbestos PLM: 08-27-2021

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200738-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Cardno
C/O: W. Ashton Smithwick
Re: CH860Q100

Date of Receipt: 08-25-2021
Date of Report: 08-27-2021

ASBESTOS PLM REPORT

| | |
|---|---|
| Total Samples Submitted: | 6 |
| Total Samples Analyzed: | 6 |
| Total Samples with Layer Asbestos Content > 1%: | 2 |

Location: RP-01-01, Shingles

Lab ID-Version‡: 13001097-1

| Sample Layers | Asbestos Content |
|---|------------------|
| Black Roofing Shingle with Gray pebbles | ND |
| Composite Non-Asbestos Content: | 15% Glass Fibers |
| Sample Composite Homogeneity: | Good |

Location: RP-01-02, Shingles

Lab ID-Version‡: 13001098-1

| Sample Layers | Asbestos Content |
|---|------------------|
| Black Roofing Shingle with Gray pebbles | ND |
| Composite Non-Asbestos Content: | 15% Glass Fibers |
| Sample Composite Homogeneity: | Good |

Location: RP-02-01, Drywall

Lab ID-Version‡: 13001099-1

| Sample Layers | Asbestos Content |
|--|------------------|
| White Texture with Paint | 2% Chrysotile |
| Cream Tape | ND |
| White Joint Compound | 2% Chrysotile |
| White Drywall with Brown Paper | ND |
| Composite Asbestos Fibrous Content: | < 1% Asbestos |
| Composite Non-Asbestos Content: | 15% Cellulose |
| Sample Composite Homogeneity: | Moderate |

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Cardno
C/O: W. Ashton Smithwick
Re: CH860Q100

Date of Receipt: 08-25-2021
Date of Report: 08-27-2021

ASBESTOS PLM REPORT

Location: RP-02-02, Drywall

Lab ID-Version‡: 13001100-1

| Sample Layers | Asbestos Content |
|--|------------------|
| Cream Tape | ND |
| White Joint Compound | 2% Chrysotile |
| White Drywall with Brown Paper | ND |
| Composite Asbestos Fibrous Content: | < 1% Asbestos |
| Composite Non-Asbestos Content: | 15% Cellulose |
| Sample Composite Homogeneity: | Moderate |

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: RP-03-01, Gray Caulk

Lab ID-Version‡: 13001101-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Gray Caulk with Paint | ND |
| Sample Composite Homogeneity: | Good |

Location: RP-03-02, Gray Caulk

Lab ID-Version‡: 13001102-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Gray Caulk with Paint | ND |
| Sample Composite Homogeneity: | Good |

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Cardno - Peachtree Corners, GA

Sample Delivery Group: L1393214
Samples Received: 08/20/2021
Project Number: CHIL0Q120
Description: Chiloquin, OR

Report To: William Smithwick
6611 Bay Circle
Suite 220
Peachtree Corners, GA 30071

Entire Report Reviewed By:



Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

| | |
|--|-----------|
| Cp: Cover Page | 1 |
| Tc: Table of Contents | 2 |
| Ss: Sample Summary | 4 |
| Cn: Case Narrative | 5 |
| Su: Summary Results | 6 |
| 6010D Metals (ICP) | 7 |
| Sample Result Inorganic Analysis Data Sheet | 7 |
| L1393214-01 08/27/21 02:03 ICP12 | 7 |
| L1393214-02 08/27/21 02:06 ICP12 | 8 |
| BLANK(R3697192-1) WG1729585 08/27/21 01:24 ICP12 | 9 |
| LCS(R3697192-2) WG1729585 08/27/21 01:26 ICP12 | 10 |
| MS(R3697192-4) WG1729585 08/27/21 01:34 ICP12 | 11 |
| MSD(R3697192-5) WG1729585 08/27/21 01:36 ICP12 | 12 |
| SD(R3697192-3) WG1729585 08/27/21 01:32 ICP12 | 13 |
| Calibration Verification | 14 |
| ICP12 082621ICP12 | 14 |
| Blank | 17 |
| ICP12 082621ICP12 | 17 |
| ICP Interference Check Sample | 19 |
| ICP12 08/26/21 16:42 | 19 |
| ICP12 08/26/21 23:24 | 20 |
| ICP12 08/27/21 05:04 | 21 |
| Matrix Spike / Duplicate | 22 |
| WG1729585 MS(R3697192-4) MSD(R3697192-5) | 22 |
| Laboratory Control Sample / Duplicate | 23 |
| WG1729585 LCS(R3697192-2) | 23 |
| Serial Dilution | 24 |
| WG1729585 SD(R3697192-3) | 24 |
| Detection Limit Summary | 25 |
| 6010D - Waste | 25 |
| Interelement Correction Factor | 26 |
| ICP12 08/24/21 13:38 | 26 |
| Linear Dynamic Range | 28 |
| ICP12 06/16/21 08:38 | 28 |
| Analysis Log | 29 |
| ICP12 082621ICP12 08/26/21 16:03 | 29 |
| Initial Calibration Recovery | 30 |
| ICP12 082621ICP12 08/26/21 16:03 | 30 |
| Initial Calibration | 32 |
| ICP12 082621ICP12 08/26/21 16:03 | 32 |

| |
|-----------------|
| ¹ Cp |
| ² Tc |
| ³ Ss |
| ⁴ Cn |
| ⁵ Su |
| ⁶ Gl |
| ⁷ Al |
| ⁸ Sc |

Gl: Glossary of Terms

Al: Accreditations & Locations

Sc: Sample Chain of Custody

33

34

35

¹Cp

²Tc

³Ss

⁴Cn

⁵Su

⁶Gl

⁷Al

⁸Sc

SAMPLE SUMMARY

RP-01 L1393214-01 Waste

Collected by
A. Smithwick

Collected date/time
08/18/21 00:00

Received date/time
08/20/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Preparation by Method 1311 | WG1728099 | 1 | 08/24/21 15:04 | 08/24/21 15:04 | TDW | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG1729585 | 1 | 08/25/21 18:19 | 08/27/21 02:03 | CCE | Mt. Juliet, TN |

RP-02 L1393214-02 Waste

Collected by
A. Smithwick

Collected date/time
08/18/21 00:00

Received date/time
08/20/21 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|------------------------------|-----------|----------|-----------------------|--------------------|---------|----------------|
| Preparation by Method 1311 | WG1728099 | 1 | 08/24/21 15:04 | 08/24/21 15:04 | TDW | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG1729585 | 1 | 08/25/21 18:19 | 08/27/21 02:06 | CCE | Mt. Juliet, TN |

1 Cp

2 Tc

3 Ss

4 Cn

5 Su

6 Gl

7 Al

8 Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager



6010D Metals (ICP)

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | L1393214-01 | SDG: | L1393214 |
| Client Sample ID: | RP-01 | Collected Date/Time: | 08/18/21 00:00 |
| Lab File ID: | 20210827020335 | Received Date/Time: | 08/20/21 09:00 |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 02:03 |
| Dilution Factor: | 1 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | ND | | 0.0330 | 0.100 |

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | L1393214-02 | SDG: | L1393214 |
| Client Sample ID: | RP-02 | Collected Date/Time: | 08/18/21 00:00 |
| Lab File ID: | 20210827020616 | Received Date/Time: | 08/20/21 09:00 |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 02:06 |
| Dilution Factor: | 1 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | ND | | 0.0330 | 0.100 |

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3697192-1

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | R3697192-1 | SDG: | L1393214 |
| Client Sample ID: | BLANK | Collected Date/Time: | |
| Lab File ID: | 20210827012400 | Received Date/Time: | |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 01:24 |
| Dilution Factor: | 1 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | U | | 0.0333 | 0.100 |

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3697192-2

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | R3697192-2 | SDG: | L1393214 |
| Client Sample ID: | LCS | Collected Date/Time: | |
| Lab File ID: | 20210827012625 | Received Date/Time: | |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 01:26 |
| Dilution Factor: | 1 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | 9.77 | | 0.0333 | 0.100 |

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3697192-4

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | R3697192-4 | SDG: | L1393214 |
| Client Sample ID: | MS | Collected Date/Time: | 08/16/21 11:15 |
| Lab File ID: | 20210827013429 | Received Date/Time: | 08/20/21 08:00 |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 01:34 |
| Dilution Factor: | 1 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | 9.83 | | 0.0333 | 0.100 |

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3697192-5

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | R3697192-5 | SDG: | L1393214 |
| Client Sample ID: | MSD | Collected Date/Time: | 08/16/21 11:15 |
| Lab File ID: | 20210827013654 | Received Date/Time: | 08/20/21 08:00 |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 01:36 |
| Dilution Factor: | 1 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | 9.86 | | 0.0333 | 0.100 |

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3697192-3

| | | | |
|--------------------|----------------|------------------------|----------------|
| Lab Sample ID: | R3697192-3 | SDG: | L1393214 |
| Client Sample ID: | SD | Collected Date/Time: | 08/16/21 11:15 |
| Lab File ID: | 20210827013201 | Received Date/Time: | 08/20/21 08:00 |
| Instrument ID: | ICP12 | Preparation Date/Time: | 08/25/21 18:19 |
| Analytical Batch: | WG1729585 | Analysis Date/Time: | 08/27/21 01:32 |
| Dilution Factor: | 5 | Prep Method: | 3015 |
| Analytical Method: | 6010D | Sample Vol Used: | |
| Matrix: | Waste | Initial Wt/Vol: | 5 mL |
| Total Solids (%): | | Final Wt/Vol: | 50 mL |

| Analyte | CAS | Result <i>mg/l</i> | Qualifier | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|-----------------------|-----------|--------------------|--------------------|
| Lead | 7439-92-1 | ND | | 0.167 | 0.500 |

CALIBRATION VERIFICATION

| | | | |
|----------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |
| Concentration Units: | mg/l | | |

| Analyte | Sample ID: | ICV | | | | ICVLL | | | | CCV | | | |
|---------|------------|-------------------|-------|----------|--------|-------------------|-------|-----------|------|-------------------|-------|----------|------|
| | | ICP120826211623-2 | | | | ICP120826211633-2 | | | | ICP120827210111-2 | | | |
| | | True | Found | %R | %RSD | True | Found | %R | %RSD | True | Found | %R | %RSD |
| LEAD | 1 | 0.9993387 | 99.90 | 0.206000 | 0.0050 | 0.005616919 | 112 | 20.300000 | 0.50 | 0.5050739 | 101 | 0.361000 | |

CALIBRATION VERIFICATION

| | | | |
|----------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |
| Concentration Units: | mg/l | | |

| Analyte | Sample ID: | CCV | | | | CCV | | | | CCV | | | |
|---------|------------|-------------------|-----|----------|------|-------------------|-----|----------|------|-----------------|-----|----------|--|
| | | ICP120827210118-2 | | | | ICP120827210150-2 | | | | ICP120827210211 | | | |
| | True | Found | %R | %RSD | True | Found | %R | %RSD | True | Found | %R | %RSD | |
| LEAD | 0.50 | 0.5042665 | 101 | 0.314000 | 0.50 | 0.50595 | 101 | 0.671000 | 0.50 | 0.5113141 | 102 | 0.572000 | |

CALIBRATION VERIFICATION

| | | | |
|----------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |
| Concentration Units: | mg/l | | |

| CCVLL | | | | |
|------------|--------|-------------------|-------|-----------|
| Sample ID: | | ICP120827210852-2 | | |
| Analyte | True | Found | %R | %RSD |
| LEAD | 0.0050 | 0.003182933 | 63.70 | 31.600000 |

| | | | |
|--------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |

| | Sample ID: | ICB Result | ICB Qual | CCB Result | CCB Qual | CCB Result | CCB Qual | BLANK Result | BLANK Qual |
|---------|------------|------------------|----------|------------------|----------|------------------|----------|----------------|------------|
| | File ID: | 20210826162546-2 | | 20210827011358-2 | | 20210827012110-2 | | 20210827012400 | |
| Analyte | | mg/l | | mg/l | | mg/l | | mg/l | |
| LEAD | | 0.001593365 | U | 0.0009517472 | U | 0.0009832964 | U | U | |

| | | | |
|--------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |

| Analyte | Sample ID: | CCB Result | CCB Qual | Sample ID: | CCB Result | CCB Qual |
|---------|------------|------------------|----------|------------|----------------|----------|
| | File ID: | 20210827015256-2 | | File ID: | 20210827021417 | |
| | | mg/l | | | mg/l | |
| LEAD | | 0.0004943883 | U | | -0.0005048188 | U |

SDG: L1393214
Instrument ID: ICP12
Instrument Run: 082621ICP12

Analytical Method: 6010D
Date: 08/26/21 16:42

| Analyte | True | Found | | True | Found | |
|----------------------|--------------|----------------|----------------|---------------|---------------|-----------------|
| | ICSA mg/l | ICSA mg/l | ICSA % Rec. | ICSAB mg/l | ICSAB mg/l | ICSAB % Rec. |
| ALUMINUM | 500 | 502.0379 | 100 | 500 | 501.9921 | 100 |
| ANTIMONY | 0 | 0.02755975 | | 0.50 | 0.5643993 | 113 |
| ARSENIC | 0 | -0.03494365 | | 0.50 | 0.512478 | 102 |
| BARIUM | 0 | 0.002959076 | | 0.50 | 0.5423834 | 108 |
| BERYLLIUM | 0 | -0.00007358297 | | 0.50 | 0.4979079 | 99.60 |
| BORON | 0 | -0.09021902 | | 1 | 0.9626316 | 96.30 |
| CADMIUM | 0 | 0.0009786234 | | 1 | 1.087652 | 109 |
| CALCIUM | 500 | 508.4613 | 102 | 500 | 507.7226 | 102 |
| CERIUM | 0 | 0.1681203 | | 0 | 0.1955043 | |
| CHROMIUM | 0 | 0.0009804087 | | 0.50 | 0.5208367 | 104 |
| COBALT | 0 | -0.0004623029 | | 0.50 | 0.5075576 | 102 |
| COPPER | 0 | 0.005100224 | | 0.50 | 0.5784515 | 116 |
| HOT WATER SOL. BORON | 0 | -0.09021902 | | 0 | 0.9626316 | |
| IRON | 200 | 201.8789 | 101 | 200 | 203.5889 | 102 |
| LANTHANUM | 0 | -0.005494578 | | 0 | -0.009495438 | |
| LEAD | 0 | -0.03503772 | | 1 | 0.9580334 | 95.80 |
| LITHIUM | 0 | 0.001406181 | | 0 | 0.003878799 | |
| MAGNESIUM | 500 | 514.5004 | 103 | 500 | 517.2876 | 103 |
| MANGANESE | 0 | 0.004084937 | | 0.50 | 0.5137185 | 103 |
| MOLYBDENUM | 0 | 0.000217832 | | 0.50 | 0.5360155 | 107 |
| NICKEL | 0 | -0.003223017 | | 1 | 0.9933387 | 99.30 |
| PHOSPHORUS | 0 | 0.005994708 | | 0 | 0.005210479 | |
| POTASSIUM | 0 | -0.09904029 | | 0 | -0.04067108 | |
| SELENIUM | 0 | 0.02472459 | | 0.50 | 0.5785699 | 116 |
| SILICON | 0 | -0.01150722 | | 1 | 1.071702 | 107 |
| SILVER | 0 | -0.0007341132 | | 1 | 1.114799 | 111 |
| SODIUM | 0 | 0.1562164 | | 0 | 0.1747456 | |
| STRONTIUM | 0 | 0.003898679 | | 0 | 0.004028935 | |
| SULFUR | 0 | -0.07472075 | | 0 | -0.09834596 | |
| THALLIUM | 0 | -0.01106474 | | 0.50 | 0.4809626 | 96.20 |
| TIN | 0 | -0.01255101 | | 0.50 | 0.477174 | 95.40 |
| TITANIUM | 0 | 0.009308359 | | 0.50 | 0.5261634 | 105 |
| VANADIUM | 0 | -0.0007290835 | | 0.50 | 0.5038603 | 101 |
| ZINC | 0 | 0.0002950366 | | 1 | 0.9970569 | 99.70 |

ICSA Limits: 80 - 120

ICSAB Limits: 80 - 120

SDG: L1393214
Instrument ID: ICP12
Instrument Run: 082621ICP12

Analytical Method: 6010D
Date: 08/26/21 23:24

| Analyte | True | Found | | True | Found | |
|----------------------|--------------|----------------|----------------|---------------|---------------|-----------------|
| | ICSA mg/l | ICSA mg/l | ICSA % Rec. | ICSAB mg/l | ICSAB mg/l | ICSAB % Rec. |
| ALUMINUM | 500 | 551.2503 | 110 | 500 | 575.7381 | 115 |
| ANTIMONY | 0 | 0.03180174 | | 0.50 | 0.5606752 | 112 |
| ARSENIC | 0 | -0.01864892 | | 0.50 | 0.5438317 | 109 |
| BARIUM | 0 | 0.003478609 | | 0.50 | 0.5586314 | 112 |
| BERYLLIUM | 0 | -0.00004508121 | | 0.50 | 0.5439089 | 109 |
| BORON | 0 | -0.1022247 | | 1 | 1.068909 | 107 |
| CADMIUM | 0 | 0.00076298 | | 1 | 1.126211 | 113 |
| CALCIUM | 500 | 535.6206 | 107 | 500 | 544.739 | 109 |
| CERIUM | 0 | 0.2528661 | | 0 | 0.3506344 | |
| CHROMIUM | 0 | 0.0008172511 | | 0.50 | 0.5295011 | 106 |
| COBALT | 0 | -0.0003726358 | | 0.50 | 0.5287809 | 106 |
| COPPER | 0 | 0.005507577 | | 0.50 | 0.5803618 | 116 |
| HOT WATER SOL. BORON | 0 | -0.1022247 | | 0 | 1.068909 | |
| IRON | 200 | 218.5789 | 109 | 200 | 221.237 | 111 |
| LANTHANUM | 0 | -0.005088498 | | 0 | -0.007204261 | |
| LEAD | 0 | -0.03669559 | | 1 | 0.9730582 | 97.30 |
| LITHIUM | 0 | 0.001343081 | | 0 | 0.001781075 | |
| MAGNESIUM | 500 | 570.2284 | 114 | 500 | 578.9104 | 116 |
| MANGANESE | 0 | 0.004378487 | | 0.50 | 0.5503041 | 110 |
| MOLYBDENUM | 0 | 0.001395187 | | 0.50 | 0.5510551 | 110 |
| NICKEL | 0 | -0.003192652 | | 1 | 1.022575 | 102 |
| PHOSPHORUS | 0 | 0.01065495 | | 0 | 0.01082105 | |
| POTASSIUM | 0 | 0.01223173 | | 0 | 0.03494858 | |
| SELENIUM | 0 | 0.03445835 | | 0.50 | 0.5990063 | 120 |
| SILICON | 0 | 0.0003109475 | | 1 | 1.094995 | 109 |
| SILVER | 0 | -0.0008659254 | | 1 | 1.145005 | 115 |
| SODIUM | 0 | 0.2397492 | | 0 | 0.262562 | |
| STRONTIUM | 0 | 0.004272831 | | 0 | 0.004531666 | |
| SULFUR | 0 | -0.0847923 | | 0 | -0.08784118 | |
| THALLIUM | 0 | -0.01751272 | | 0.50 | 0.495921 | 99.20 |
| TIN | 0 | -0.01262536 | | 0.50 | 0.4756486 | 95.10 |
| TITANIUM | 0 | 0.01215882 | | 0.50 | 0.5784899 | 116 |
| VANADIUM | 0 | -0.002840961 | | 0.50 | 0.5473146 | 109 |
| ZINC | 0 | 0.0001905174 | | 1 | 1.094725 | 109 |

ICSA Limits: 80 - 120

ICSAB Limits: 80 - 120

SDG: L1393214
Instrument ID: ICP12
Instrument Run: 082621ICP12

Analytical Method: 6010D
Date: 08/27/21 05:04

| Analyte | True | Found | | True | Found | |
|----------------------|--------------|----------------|----------------|---------------|---------------|-----------------|
| | ICSA mg/l | ICSA mg/l | ICSA % Rec. | ICSAB mg/l | ICSAB mg/l | ICSAB % Rec. |
| ALUMINUM | 500 | 502.5224 | 101 | 500 | 503.1821 | 101 |
| ANTIMONY | 0 | 0.01808757 | | 0.50 | 0.5479234 | 110 |
| ARSENIC | 0 | -0.01754558 | | 0.50 | 0.4844012 | 96.90 |
| BARIUM | 0 | 0.002872428 | | 0.50 | 0.5287579 | 106 |
| BERYLLIUM | 0 | -0.00006848697 | | 0.50 | 0.4789366 | 95.80 |
| BORON | 0 | -0.07727791 | | 1 | 0.9152908 | 91.50 |
| CADMIUM | 0 | 0.001028797 | | 1 | 1.050905 | 105 |
| CALCIUM | 500 | 458.3567 | 91.70 | 500 | 457.1739 | 91.40 |
| CERIUM | 0 | 0.05331246 | | 0 | 0.08013209 | |
| CHROMIUM | 0 | 0.001037285 | | 0.50 | 0.4979886 | 99.60 |
| COBALT | 0 | -0.0001226026 | | 0.50 | 0.4784037 | 95.70 |
| COPPER | 0 | 0.003390379 | | 0.50 | 0.5581955 | 112 |
| HOT WATER SOL. BORON | 0 | -0.07727791 | | 0 | 0.9152908 | |
| IRON | 200 | 182.4722 | 91.20 | 200 | 183.1418 | 91.60 |
| LANTHANUM | 0 | -0.008883124 | | 0 | -0.008419473 | |
| LEAD | 0 | -0.02885473 | | 1 | 0.8757265 | 87.60 |
| LITHIUM | 0 | 0.005254951 | | 0 | 0.00377048 | |
| MAGNESIUM | 500 | 445.6935 | 89.10 | 500 | 446.0002 | 89.20 |
| MANGANESE | 0 | 0.004292363 | | 0.50 | 0.508835 | 102 |
| MOLYBDENUM | 0 | 0.001307683 | | 0.50 | 0.5198888 | 104 |
| NICKEL | 0 | -0.001906144 | | 1 | 0.9211901 | 92.10 |
| PHOSPHORUS | 0 | 0.01053435 | | 0 | 0.0091215 | |
| POTASSIUM | 0 | -0.09170468 | | 0 | -0.07259864 | |
| SELENIUM | 0 | 0.02223213 | | 0.50 | 0.5161625 | 103 |
| SILICON | 0 | 0.0202869 | | 1 | 1.094529 | 109 |
| SILVER | 0 | 0.0001814243 | | 1 | 1.161678 | 116 |
| SODIUM | 0 | 0.1001602 | | 0 | 0.08107117 | |
| STRONTIUM | 0 | 0.004067084 | | 0 | 0.004128314 | |
| SULFUR | 0 | -0.05367699 | | 0 | -0.07892034 | |
| THALLIUM | 0 | -0.01282431 | | 0.50 | 0.4551179 | 91 |
| TIN | 0 | -0.01341143 | | 0.50 | 0.430177 | 86 |
| TITANIUM | 0 | 0.006659427 | | 0.50 | 0.5121024 | 102 |
| VANADIUM | 0 | 0.001032534 | | 0.50 | 0.48235 | 96.50 |
| ZINC | 0 | 0.005763101 | | 1 | 0.833053 | 83.30 |

ICSA Limits: 80 - 120

ICSAB Limits: 80 - 120

MS Sample / File ID:R3697192-4 / 20210827013429

MSD Sample / File ID:R3697192-5 / 20210827013654

OS Sample / File ID:L1393142-01 / 20210827012909

Instrument ID:ICP12

Analytical Method:6010D

SDG:L1393214

Analytical Batch:WG1729585

Matrix:Waste

| Analyte | Spike Amount <i>mg/l</i> | OS Result <i>mg/l</i> | MS Result <i>mg/l</i> | MSD Result <i>mg/l</i> | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | RPD % | RPD Limits % |
|---------|-----------------------------|--------------------------|--------------------------|---------------------------|--------------|---------------|----------|------------------|----------|-----------------|
| Lead | 10.0 | ND | 9.83 | 9.86 | 98.3 | 98.6 | 1 | 75.0 - 125 | 0.373 | 20 |

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY
L1393214-01,02

SAMPLE NO.:
R3697192-2

| | | | |
|------------------------|-----------------------------|-------------------|-----------|
| LCS Sample / File ID: | R3697192-2 / 20210827012625 | SDG: | L1393214 |
| LCSD Sample / File ID: | | Analytical Batch: | WG1729585 |
| Instrument ID: | ICP12 | Dilution Factor: | 1 |
| Analytical Method: | 6010D | Matrix: | Waste |

| Analyte | Spike Amount <i>mg/l</i> | LCS Result <i>mg/l</i> | LCSD Result | LCS Rec. % | LCSD Rec. % | Rec. Limits % | RPD % | RPD Limits % |
|---------|-----------------------------|---------------------------|-------------|---------------|----------------|------------------|----------|-----------------|
| Lead | 10.0 | 9.77 | | 97.7 | | 80.0 - 120 | | |

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ICP AND ICP/MS
SERIAL DILUTIONS
L1393214-01,02

SAMPLE NO.:
R3697192-3

| | | | |
|----------------------|------------------------------|-------------------|-----------|
| SD Sample / File ID: | R3697192-3 / 20210827013201 | SDG: | L1393214 |
| OS Sample / File ID: | L1393142-01 / 20210827012909 | Analytical Batch: | WG1729585 |
| Lab File ID: | 20210827013201 | Dilution Factor: | 5 |
| Instrument ID: | ICP12 | Matrix: | Waste |
| Analytical Method: | 6010D | | |

| Analyte | OS Result <i>mg/l</i> | SD Result <i>mg/l</i> | RPD % | RPD Limits % |
|---------|-----------------------------|-----------------------------|----------|--------------------|
| Lead | ND | ND | 0.000 | 10 |

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

| | | | |
|-----------------|----------------|--------------------|-------|
| Lab Sample IDs: | L1393214-01,02 | Analytical Method: | 6010D |
| Matrix: | Waste | Prep Method: | 3015 |

| Analyte | CAS | Wavelength | Mass | MDL <i>mg/l</i> | RDL <i>mg/l</i> |
|---------|-----------|------------|----------|--------------------|--------------------|
| Lead | 7439-92-1 | 189.0420 | 220.3530 | 0.0330 | 0.10 |

10A-IN

INTERELEMENT CORRECTION FACTORS

SDG:

Instrument ID:

L1393214

ICP12

Analytical Method:

Date:

6010D

08/24/21 13:38

| Analyte | Wavelength nm | ARSENIC 189.0420 | CALCIUM 317.9330 | CHROMIUM 267.7160 | COBALT 228.6160 | COPPER 324.7540 | IRON 259.94 | LANTHANUM 333.7490 |
|-----------|------------------|---------------------|---------------------|----------------------|--------------------|--------------------|----------------|-----------------------|
| ALUMINUM | 308.2150 | | | | | | | |
| ANTIMONY | 206.8330 | | | -0.00010364 | | | | |
| ARSENIC | 189.0420 | | | | | | | -0.00520043 |
| BARIUM | 233.5270 | | | | | | -0.00011317 | |
| BERYLLIUM | 313.0420 | | | | | | | |
| CADMIUM | 228.8020 | -0.25019590 | | | | | | |
| CHROMIUM | 267.7160 | | | | | | | |
| COBALT | 228.6160 | | | | | | | |
| IRON | 271.4410 | | | | -0.00018664 | | | |
| LEAD | 220.3530 | | | | | -0.00003085 | | -0.00013179 |
| LITHIUM | 670.7840 | | -0.00032182 | | | | | |
| SELENIUM | 196.09 | | | -0.00001854 | | | | |
| THALLIUM | 190.8560 | | | | -0.00026544 | | | |

| | | | |
|----------------|----------|--------------------|----------------|
| SDG: | L1393214 | Analytical Method: | 6010D |
| Instrument ID: | ICP12 | Date: | 08/24/21 13:38 |

| Analyte | Wavelength nm | MANGANESE 257.61 | SILICON 251.6110 | TIN 189.9890 | TITANIUM 334.9410 | VANADIUM 292.4020 |
|-----------|------------------|---------------------|---------------------|-----------------|----------------------|----------------------|
| ALUMINUM | 308.2150 | | | | | -0.00434031 |
| ANTIMONY | 206.8330 | | | -0.00419814 | | |
| ARSENIC | 189.0420 | | | | | |
| BARIUM | 233.5270 | | | | | |
| BERYLLIUM | 313.0420 | | | | | -0.02889282 |
| CADMIUM | 228.8020 | | | | | |
| CHROMIUM | 267.7160 | -0.00003148 | | | | |
| COBALT | 228.6160 | | | | -0.00101627 | |
| IRON | 271.4410 | | | | | |
| LEAD | 220.3530 | | -0.00008881 | | | |
| LITHIUM | 670.7840 | | | | | |
| SELENIUM | 196.09 | | | | | |
| THALLIUM | 190.8560 | -0.00000492 | | | | |

SDG: L1393214
Instrument ID: ICP12

Analytical Method: 6010D
Date: 06/16/21 08:38

| Analyte | LDR <i>ppm</i> |
|------------|-------------------|
| ALUMINUM | 500 |
| ANTIMONY | 10 |
| ARSENIC | 50 |
| BARIUM | 50 |
| BERYLLIUM | 10 |
| BORON | 50 |
| CADMIUM | 10 |
| CALCIUM | 1000 |
| CHROMIUM | 50 |
| COBALT | 50 |
| COPPER | 50 |
| IRON | 500 |
| LEAD | 100 |
| LITHIUM | 10 |
| MAGNESIUM | 1000 |
| MANGANESE | 20 |
| MOLYBDENUM | 20 |
| NICKEL | 50 |
| PHOSPHORUS | 200 |
| POTASSIUM | 500 |
| SELENIUM | 10 |
| SILICON | 40 |
| SILVER | 10 |
| SODIUM | 1000 |
| STRONTIUM | 20 |
| SULFUR | 200 |
| THALLIUM | 10 |
| TIN | 50 |
| TITANIUM | 50 |
| VANADIUM | 20 |
| ZINC | 20 |

| | | | |
|------------------------|-------------|--------------------------------|----------------|
| SDG: | L1393214 | Analytical Method: | 6010D |
| Instrument ID: | ICP12 | Calibration Start Date: | 08/26/21 16:03 |
| Analytical Run: | 082621ICP12 | Calibration End Date: | 08/26/21 16:20 |

| Client Sample ID | Lab Sample ID | File ID | Analysis Date Time | Dilution | Batch |
|------------------|-------------------|------------------|--------------------|----------|-----------|
| CALBLK | ICP120826211601 | 20210826160102 | 08/26/21 16:01 | | |
| CAL | STD1 | 20210826160349 | 08/26/21 16:03 | | |
| CAL | STD2 | 20210826160620 | 08/26/21 16:06 | | |
| CAL | STD3 | 20210826160846 | 08/26/21 16:08 | | |
| CAL | STD4 | 20210826161118 | 08/26/21 16:11 | | |
| CAL | STD5 | 20210826161357 | 08/26/21 16:13 | | |
| CAL | STD6 | 20210826161653 | 08/26/21 16:16 | | |
| CAL | STD7 | 20210826162006 | 08/26/21 16:20 | | |
| ICV | ICP120826211623-2 | 20210826162302-2 | 08/26/21 16:23 | | |
| ICB | ICP120826211625-2 | 20210826162546-2 | 08/26/21 16:25 | | |
| ICVLL | ICP120826211633-2 | 20210826163341-2 | 08/26/21 16:33 | | |
| ICSA | ICP120826211642-2 | 20210826164235-2 | 08/26/21 16:42 | | |
| ICSAB | ICP120826211645-2 | 20210826164528-2 | 08/26/21 16:45 | | |
| ICSA | ICP120826212324-2 | 20210826232404-2 | 08/26/21 23:24 | | |
| ICSAB | ICP120826212326-2 | 20210826232657-2 | 08/26/21 23:26 | | |
| CCV | ICP120827210111-2 | 20210827011107-2 | 08/27/21 01:11 | | |
| CCB | ICP120827210113-2 | 20210827011358-2 | 08/27/21 01:13 | | |
| CCV | ICP120827210118-2 | 20210827011817-2 | 08/27/21 01:18 | | |
| CCB | ICP120827210121-2 | 20210827012110-2 | 08/27/21 01:21 | | |
| BLANK | R3697192-1 | 20210827012400 | 08/27/21 01:24 | 1 | WG1729585 |
| LCS | R3697192-2 | 20210827012625 | 08/27/21 01:26 | 1 | WG1729585 |
| OS | L1393142-01 | 20210827012909 | 08/27/21 01:29 | | |
| L1393142-01 | L1393142-01 | 20210827012909 | 08/27/21 01:29 | 1 | WG1729585 |
| SD | R3697192-3 | 20210827013201 | 08/27/21 01:32 | 5 | WG1729585 |
| MS | R3697192-4 | 20210827013429 | 08/27/21 01:34 | 1 | WG1729585 |
| MSD | R3697192-5 | 20210827013654 | 08/27/21 01:36 | 1 | WG1729585 |
| CCV | ICP120827210150-2 | 20210827015003-2 | 08/27/21 01:50 | | |
| CCB | ICP120827210152-2 | 20210827015256-2 | 08/27/21 01:52 | | |
| RP-01 | L1393214-01 | 20210827020335 | 08/27/21 02:03 | 1 | WG1729585 |
| RP-02 | L1393214-02 | 20210827020616 | 08/27/21 02:06 | 1 | WG1729585 |
| CCV | ICP120827210211 | 20210827021127 | 08/27/21 02:11 | | |
| CCB | ICP120827210214 | 20210827021417 | 08/27/21 02:14 | | |
| ICSA | ICP120827210504-2 | 20210827050442-2 | 08/27/21 05:04 | | |
| ICSAB | ICP120827210507-2 | 20210827050738-2 | 08/27/21 05:07 | | |
| CCVLL | ICP120827210852-2 | 20210827085229-2 | 08/27/21 08:52 | | |

INITIAL CALIBRATION RECOVERY

| | | | |
|--------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |

| Analyte | Std Conc mg/l | Result mg/l | Rec. % | Std Conc mg/l | Result mg/l | Rec. % |
|----------|------------------|----------------|-----------|------------------|----------------|-----------|
| LEAD | 0.0050 | .005706251 | 114 | 0.50 | .5014866 | 100 |
| File ID: | | 20210826160349 | | | 20210826160620 | |

INITIAL CALIBRATION RECOVERY

| | | | |
|--------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |

| Analyte | Std Conc mg/l | Result mg/l | Rec. % | Std Conc mg/l | Result mg/l | Rec. % |
|----------|------------------|----------------|-----------|------------------|----------------|-----------|
| LEAD | 1 | .9953524 | 99.50 | 2 | 2.00195 | 100 |
| File ID: | | 20210826160846 | | | 20210826161118 | |

INITIAL
CALIBRATION

| | | | |
|--------------------|----------|--------------------------------|----------------|
| SDG: | L1393214 | Calibration (begin) date/time: | 08/26/21 16:03 |
| Instrument ID: | ICP12 | Calibration (end) date/time: | 08/26/21 16:20 |
| Analytical Method: | 6010D | Analytical Run: | 082621ICP12 |

| Analyte | Wavelength | Cal. Type | Weightage | Corr. | Slope | Incpt |
|---------|------------|-----------|-----------|----------|----------|----------|
| LEAD | 220.353 | 8 | 5 | 0.999995 | 814.8551 | 3.229964 |

| |
|--|
| Calibration Type |
| 8 = Linear Regression Forced through Blank |
| Weightage |
| 5 = None |

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

| | |
|------------------------------|--|
| Corr. | Correlation Coefficient. |
| Incpt | Intercept. |
| Mass | Mass of parameter. |
| MDL | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Slope | Slope of calibration curve. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Wavelength | Wavelength of parameter. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| | | | |
|--------------------------------|-------------|-----------------------------|------------------|
| Alabama | 40660 | Nebraska | NE-OS-15-05 |
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey--NELAP | TN002 |
| California | 2932 | New Mexico ¹ | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina ¹ | DW21704 |
| Georgia | NELAP | North Carolina ³ | 41 |
| Georgia ¹ | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio--VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LA000356 |
| Kentucky ^{1,6} | KY90010 | South Carolina | 84004002 |
| Kentucky ² | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee ^{1,4} | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas ⁵ | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA -- ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA -- ISO 17025 ⁵ | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA--Crypto | TN00003 | | |

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Appendix C

Inspector Accreditations



now



Greenville Technical College

PO Box 5616, 738 S. Pleasantburg Drive, Greenville, South Carolina 29606-5616 (864) 250-8800

ROBERT HALL

307 Block House Rd., Greenville, SC 29615

2999

*has completed the requisite training for asbestos accreditation under TSCA Title II and has met
the requirements of and passed the examination for an EPA approved*

Asbestos Project Designer Refresher Training Course

Greenville, SC

222 - EVT514 - 003

Certificate Number

January 12, 2022

Course Date(s)

January 12, 2022

Examination Date

Attended and Satisfactorily Completed Course
Exam with a Passing Score of 70% or Better



Mike Cashio

Mike Cashio, Principal Instructor

Joy N. Finch

Joy N. Finch, Training Manager

January 12, 2023

Expiration Date

Approved for Remote Delivery

The Environmental Institute

William Smithwick

Social Security Number - XXX-XX-1496
Cardno - 6611 Bay Circle, Suite 220, Norcross, GA 30071

*Has completed 4 hours of coursework and satisfactorily
passed an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation*

Asbestos in Buildings: Inspector Refresher

November 19, 2020

Course Date

18209

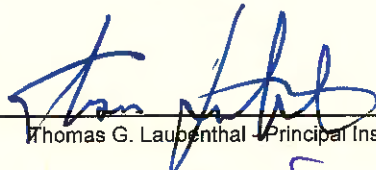
Certificate Number

November 19, 2020

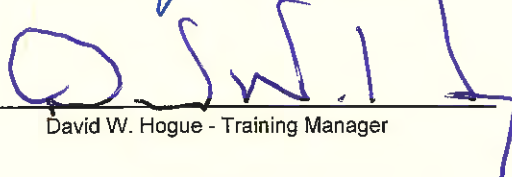
Examination Date

November 18, 2021

Expiration Date



Thomas G. Laubenthal - Principal Instructor



David W. Hogue - Training Manager



(Approved by the ABIH Certification Maintenance Committee for 1/2 CM point - Approval #11-577)

(Florida Provider Registration Number FL49-0001342 - Course #FL49-0002805)

TEI - 1395 S. Marietta Parkway SE - Building 100, Suite 124 - Marietta, GA 30067

Phone: 770-427-3600 - Website: www.tei-atl.com

The Environmental Institute

William Smithwick

Social Security Number - XXX-XX-1496

Cardno - 2010 Druid Hills Reserve Drive NE - Atlanta, Georgia 30329

Has completed 24 hours of coursework and satisfactorily passed the hands-on skills assessment and an examination that meets training criteria in accordance with requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 391-3-24 and U. S. EPA TSCA 40 CFR Part 745 for the initial course titled

Lead Inspector: EPA (Target Housing & Child-Occupied Facilities)

February 24-26, 2020

Course Date

5300

Certificate Number

February 26, 2020

Examination Date

August 26, 2020

EPA Interim Expiration Date

February 25, 2022

Georgia Expiration Date

February 25, 2023

EPA Expiration Date



David W. Hogue - Principal Instructor / Training Manager

(Approved by the ABIH Certification Maintenance Committee for 3 CM points - Approval #11-563)

TEI - 1395 S. Marietta Parkway SE - Building 100, Suite 124 - Marietta, GA 30067

Phone: 770-427-3600 - Website: www.tei-atl.com

(State of Georgia Accredited - Certification No. 20-0799-0061 - January 15, 1997)