Project Manual For:
Idaho Transportation Department
District #1

ITD D-1 Lab
Maintenance Building
600 W. Prairie Ave.
Coeur d’ Alene, Idaho 83815

Kootenai County

Wednesday, March 13, 2024

MSA Project Number: 2314
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<tr>
<th>Role</th>
<th>Name</th>
<th>Company/Address</th>
<th>Contact Information</th>
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<tbody>
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SECTION 000030 – ADVERTISEMENT FOR BIDS

PRIME CONTRACT PACKAGES for:
D231130 – D-1 Coeur d’Alene Laboratory Facility – Phase 1
Idaho Transportation Department (ITD), Coeur d’Alene, Idaho

Bid Packages shall consist of multiple individual trade scope packages that will be direct prime contracts with ITD. ITD has retained a CM Agent (Bateman-Hall, Inc.) to help coordinate the management of the overall project.

Each Prime Contractor will be required to cooperate and coordinate with the CM and all other Contractors to perform their work in accordance with a Master Project Schedule developed, updated, and maintained by the CM. Each Prime Contractor will be required to provide specified scheduling information necessary to maintain the Master Project Schedule and to meet the milestone completion dates as identified on the Bid Form and in each Prime Contract.

PROJECT SCOPE: Complete Site Development including all utilities to the new laboratory facility; demolition of existing items; prepare building pad; asphalt and striping; site concrete; water lines to trailer pedestals; complete site electrical including electrical pedestals for trailers and communication/low voltage.

All work shall be performed in accordance with Contract Documents, Plans, Specifications, Department of Public Works Standards, The International Building Code, and as directed by the ITD Representatives.

BID PACKAGES Will be as per BID PACKAGE INDEX (Spec Section 000031).

Complete Bidding Documents will be available beginning March 13th, 2024. Plans (on a CD) will be made available at no cost from Bateman-Hall, Inc. at 208-523-2681.

Plans can also be viewed or downloaded on smartbidnet.com. If you do not have a username and password, please send a request by email to bids@bateman-hall.com. Please include the following: Company Name, Contact Person, Phone Number, Fax or E-mail, Company Scope of Work, and States the company works in.

PRE-BID CONFERENCE: Will be held at 9:00 AM (PT) on Wednesday, March 27th, 2024, at the project location of ITD Coeur d’Alene Office, 600 W. Prairie AVE, Coeur D’Alene, ID 83814. Attendance is highly recommended.

COMMUNICATION: All communication is to be through Bateman-Hall, Inc. Requests for clarification or interpretation of the Bidding Documents must be in writing and received no later than March 29th, 2024, at noon. Questions received after the above-noted deadline may be answered at the discretion of the ITD Representative.

Revisions, additions, and deletions will be made by written addenda issued by the CM and/or Miller Stauffer Architects. Only questions answered by formal written addenda will be binding.
Oral and other interpretations or clarifications will be without legal effect. Questions may be mailed, e-mailed, or faxed to:

Malone Bullock, Bateman-Hall, Inc.
P.O. Box 1464, Idaho Falls, Idaho 83403-1464
Phone: 208-523-2681 Fax: 208-524-4435
E-mail: Malone.bullock@bateman-hall.com

**BID DATE:** All bids are to be submitted in a sealed and labeled envelope on **Wednesday, April 3rd, 2024.** No bids will be accepted after 12:59:59 PM Pacific Time (1:59:59 PM Mountain Time).

**BID TIMES - STAGGERD (Pacific Time Zone):** Bid due times will be staggered by bid package (identified below) and will be opened and read publicly immediately following the closing of each bid package.

<table>
<thead>
<tr>
<th>Bid Package (BP) #</th>
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<td>BP-02 FM 12413</td>
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Each sealed envelope should be labeled with the following: **Company’s Name, Address, “Sealed Bid Enclosed for D231130”, Bid Package Name and Number.**

Bids will be received only at: **ITD District 1**
**ATTN: Front Desk, Drew Hatfield**
**600 W. Prairie**
**Coeur d’Alene, ID 83815**

**FAXED OR EMAILED BIDS WILL NOT BE ACCEPTED.**
This Public Works project **IS NOT** financed in whole or in part by federal funds. Contractors will be required to pay not less than the minimum wage established by the Idaho Legislature or by the Department of Labor - State of Idaho that is in effect at the time the contract is awarded.

Contractors shall be licensed in the State of Idaho in accordance with the provisions of the **Idaho Public Works Contractors’ State License Law.**

The Owner reserves the right to accept or reject any and all proposals with or without cause, for any reason determined in its sole subjective determination to be in its best interest and to waive any informality in bidding.

ITD will determine whether to award the Contract within a period not to exceed forty-five (45) days from Bid Opening Date and will notify the Bidders of the determination. **All Bidders are expected to honor their proposals for the 45-day review period.**
**Bid Bond will be required** by Contractors for this project at the rate of **5% of the total bid** and is to be included in the sealed envelope. Form of Bid Bond must be in the form of a surety bond or may be a cashier’s check or money order made to the order of “Idaho Transportation Department” as outlined by Idaho Statutes for public work projects.

**Final Addendum will be issued on Monday, April 1st, 2024.**

-END OF ADVERTISEMENT FOR BIDS-
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BP-01 Earthwork/Utilities (FM12412)

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02 50 01 – Site Photos (For Reference Only)
02 41 00 – Demolition
03 47 00 – Site Cast Concrete
31 10 00 – Site Clearing
31 20 00 – Earth Moving
32 10 00 – Base, Ballast, & Paving
33 10 00 – Water Utilities
33 30 00 – Sanitary Sewerage Utilities
33 40 00 – Storm Drainage Utilities
33 50 00 – Fuel Distribution Utilities

Work to Include, but not limited to the supply and installation of:

Removal of the following items as identified on the drawings:
   Trees; Poles; Concrete sidewalk; Curb & Gutters; Sawcut, demolish, and remove existing asphalt
Building Pad preparation, including footing excavation and backfill;
Wet Utilities to within 5’ building;
Water lines and valves to pedestals by trailer pads; (including pedestals/Hydrants)
Natural Gas Lines to future building;
Right-of-Way Permit and Fees;
Professional surveying for construction staking (also to include building corners & gridlines);
Aggregate base course for slab on grade, all site concrete, and asphalt paving;
Fine grading of aggregate base course for all site concrete;
Asphalt Paving and patching, include pavement marking and signs;
Traffic Control; Removal of excess spoils; Dust Control; Street Sweeping;
SWPPP Installation and maintenance, including concrete washout and removal;
Clean-up and Waste Disposal of own work;
Public and Private utility locates completed before any digging can start;
Protection of existing utilities (review electrical drawings for existing site electrical);
BP-02 Site Electrical (FM12413)

Contract Documents
Division 00 – Procurement and Contracting Requirements
Division 01 – General Requirements

02 50 01 – Site Photos (For Reference Only)
02 41 00 - Demolition
26 00 00 – Electrical
27 00 00 – Communications
28 00 00 – Electronic Safety and Security
31 10 00 – Site Clearing
31 20 00 – Earth Moving
33 70 00 – Electrical Utilities
33 80 00 – Communication Utilities

Work to Include, but not limited to the supply and installation of:

Electrical Permits and Fees;
CM Trailer Hook-up;
Coordination with Power Company for services needed;
Power Pedestals for trailers & associated work;
All trenching, backfill conduits and concrete associated with new service;
Excavation and backfill of own work;
Removal of own spoil piles;
Communication/Low voltage conduits;
Clean-Up of Own Work;
Public and Private utility locates completed before any digging can start;
Protect Existing Utilities (review utility drawing for existing utilities and electrical routes);
Dust Control;

Communication conduits per detail E1 on sheet ES1.0 running to the building needs to be 5’ from building with location marked above ground, rest completed during phase 2.
The secondary conduit lines for power for the building will need to be stubbed 5’ out from the transfer key noted 3 on sheet ES1.0 and marked above ground to be picked up during phase 2.
Generator and associated conduit to building will be part of phase 2.

END OF SECTION 000031
SECTION 000070 – LICENSING OF PUBLIC WORKS CONTRACTORS NOTICE

NOTICE LICENSING OF PUBLIC WORKS CONTRACTORS STATE OF IDAHO

UNLAWFUL For any person to engage in the business or act in the capacity of a PUBLIC WORKS CONTRACTOR in the State of Idaho without a license.

PENALTIES Any person, firm, co-partnership, or corporation, acting as a PUBLIC WORKS CONTRACTOR without a license shall be guilty of a MISDEMEANOR.

EVERY PUBLIC OFFICER who knowingly lets a public contract to any person, firm, co-partnership, or corporation, who does not hold a license shall be guilty of a MISDEMEANOR.

EXCEPTION No contractor shall be required to have a license in order to submit a bid or proposal for contracts for public works FINANCED IN WHOLE OR IN PART BY FEDERAL AID FUNDS, but at or prior to the award and execution of any such contract by the State of Idaho, or other contracting authority, the successful bidder shall secure a license.

SUPPLY ONLY CONTRACTS Contractors whose scope of work is supply only are not required to have a public works license.

WHO MUST BE LICENSED “Public works contractors,” – which is any “builder,” or “specialty contractor,” or any person who offers to submit a proposal or enter into a contract with the STATE OF IDAHO, or any COUNTY, CITY, TOWN, VILLAGE, SCHOOL DISTRICT, IRRIGATION DISTRICT, DRAINAGE DISTRICT, SEWER DISTRICT, FIRE DISTRICT, or any other taxing subdivision or district of the State, authorities to let or award contracts for the construction, repair or reconstruction of any public work.

PUBLIC WORK includes HEAVY, HIGHWAY, BUILDING and SPECIALTY construction.

EXEMPTION Any construction, alteration, improvement or repair involving an estimate cost of less than $10,000.

AUTHORITY - Title 54, Chapter 19, Idaho Code as amended, “THE PUBLIC WORKS CONTRACTORS LICENSE ACT.”

DIVISION OF BUILDING SAFETY
PUBLIC WORKS CONTRACTORS LICENSING
1090 E Watertower Street, Suite 150
Meridian, ID 83642
Phone: 208-334-4057

END OF SECTION 000070
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SECTION 000100 – INSTRUCTIONS TO BIDDERS

DEFINITIONS
The Bidding Documents comprise the Project Documents and shall consist of the plans, the contents of the specification books (including all documents referred to in the plans and specifications) and any addenda issued by the architect. The Bidding Requirements and the proposed Contract Documents are also included in the Project Documents.

Addenda are written or graphic documents issued by the Architect or Construction Manager prior to execution of the Contract which modify or interpret the Project Documents. The Addenda become part of the Contract Documents as noted in the Form or Agreement upon execution of the Contract.

Verbal Communications do not supersede the project documents. The project documents (plans, specifications, addenda) take precedence over verbal, email or other comments not included in addenda. If you feel a verbal comment made during a pre-bid meeting, phone call, etc. is important, it must be issued to the CM in RFI format and clarified in an official addendum.

A sample of the Contract is included in the project documents. Accepted bidder will be issued a contract that will include the Executed Bid Form as an attachment/exhibit to the Contract.

BIDDER’S REPRESENTATIONS
By submitting a bid, the bidder represents that:
1) Bidder has carefully studied and compared the Bidding Documents with each other. Bidder understands the Bidding Documents and the bid is fully in accordance with the requirements of those documents;
2) Bidder has thoroughly examined the site and buildings located thereon, has become familiar with local conditions which might directly or indirectly affect the contract work, and has correlated its personal observation with the requirements of the proposed Project Documents; and
3) Bidder fully understands the requirements identified in the Bid Form and understands that the Bid Form will be incorporated into the executed contract; and
4) Bid is based on the material, equipment, and systems required by the Bidding Documents without exception.

BIDDING DOCUMENTS
Copies of Bidding Documents in digital format shall be obtained from the Construction Manager as outlined in the Advertisement for Bids. Partial sets of Bidding Documents will not be issued.

Bidders shall use complete sets of Bidding Documents in preparing bids and make certain that those submitting sub-bids to them have access to all portions of the documents that pertain to the work covered by sub-bid, including General conditions, Special & Supplementary Conditions, and Division 00 & 01. Bidder assumes full responsibility for errors or misinterpretations resulting from use of partial sets of Bidding Documents by itself or any sub-bidder.

Interpretation or Correction of Bidding Documents
If any bidder, in his study of the Bidding Documents as described above, is in doubt as to the true meaning of any part of the proposed Contract Documents or finds errors, discrepancies, or omissions in them, he shall at once request interpretation or correction of those errors, discrepancies, and omissions as outlined in the Advertisement for Bids.

Bid the MOST EXPENSIVE option called for in the bidding documents. If there is a discrepancy between any documents (plans, specifications, addenda), you are to include the most expensive option. Also, you are welcome to submit any cost savings option as identified in the Bid Form Attachment section of this specification (see below).
Substitutions & Equal Products
Substitutions for specified products and systems, as defined in the Uniform Commercial Code, are not acceptable. However, equal products may be approved upon compliance with Contract Documents requirements. The terms “Acceptable Manufacturers” and “approved Manufacturers/Supplies/Installers” are used throughout the Project Manual to differentiate among the options available to Contractor regarding specified products, manufacturers and suppliers.

Base bid only on material, equipment, systems, and suppliers specified in the Project Manual unless:
- Specified Material, equipment, or system is listed under the heading “acceptable Manufacturers, and
- Request for use of equal products is submitted in a properly complete Equal Product Approval Request Form for Architect’s approval seven days minimum prior to bid opening, and
- Approval for use of such equal product is secured by Addendum issued prior to the scheduled bid opening time.

Addenda
Addenda will be posted no later than 48 hours prior to bid opening. No addenda will be issued less than 48 hours prior to bid opening.

BIDDING PROCEDURES
Bids shall be prepared on Contractor Bid Form shown in section 000300. A photocopy of the form bound in the Project Manual or a modified form included in an addendum is acceptable. Fill in all blanks on bid Form by typewriter or by printing manually in ink. Signatures shall be in longhand and executed by representative of bidder duly authorized to make contracts.

Bids shall bear no information other than that requested on Bid Form. Bid form shall bear no other marks, erasures writing changes or interlineations. Attachments shall not be included unless specifically required by a statement on the Bid Form or as addressed in the Bid Form Attachment section of this specification.

Bid Form Attachment
1) Bidders are encouraged to provide “Value Engineering Options or Cost Saving Options (VE Options)” in addition to their base bid, on their own form as an attachment to the bid. ITD will take into consideration the attached VE items in evaluating subcontractor proposals for award. VE Options shall not be included in the Base Bid (Bid Form) numbers and will only be included and identified as an attachment to the Bid Form.

Bid Bond
A Bid Bond in the amount of 5% of the total bid will be required as per the instructions identified in the Advertisement for Bids, Section 000030.

Performance & Payment Bond
It is not required of each bidder to provide a payment and performance bond at time of bid; however, each bidder must be capable of providing a payment and performance bond in the amount of 100% of the contract sum and will identify their Bond Rate/Amount on their Bid Form. The owner and reserves the right to elect some bidders to provide such bonding prior to contract award. The costs for a payment and performance bond will be incorporated into the notice of award and the contractor shall have 10 days from the notice of award to secure the bonding.

Failure or refusal to furnish bonds or insurance policies or certificates in a form satisfactory to the Owner shall subject the bidder to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

Insurances
Liability and Workers’ Compensation Insurance shall be provided at time of award for the amounts identified in the contract. Contractor shall name Owner and CM as additional Insured.
**Submission of Bids**
Submit bid in accordance with Section 000030 Advertisement for Bids & 000300 Contractor Bid Form.

**Modification Or Withdrawal of Bid**
Bidder guarantees there shall be no revisions or withdrawal of bid amount for 45 days after bid opening. Prior to bid opening, bidders may withdraw bid by written request or by reclaiming bid envelope.

**Naming of Contractors**
With regard to possessing an appropriate license or certificate of competency all contractors must have, at the time of the bid opening, a current license in the appropriate category (class, type and specialty category) as issued by the Public Works Contractors State License Board. In addition, plumbing and electrical subcontractors shall have, at the time of the bid opening, a valid plumbing contractor’s license or electrical contractor’s license, respectively as issued by the Idaho Division of Building Safety.

**CONSIDERATION OF BIDS**

**Opening of bids** – See Advertisement for Bids

**Right to Accept or Reject** - The Owner reserves the right to accept or reject any and all bids with or without cause, for any reason determined in its sole subjective determination to be in its best interest and to waive any informality in bidding.

**Acceptance of Bid** – No bidder shall consider itself under contract after opening and reading of bids until a Notice of Award has been issued and compliance therewith has been made.

The Owner does not discriminate on the basis of race, religion, sex, national origin, marital status, age, physical handicap, ownership by women or minorities or sexual orientation.

Bidders past performance, installer qualifications/certifications, organization, subcontractor’s selection, equipment, and ability to perform and complete its contract in the manner and within time specified, together with amount of bid and VE items provided, will be elements considered in award of a contract.

**FORM OF AGREEMENT BETWEEN CM/GC & SUBCONTRACTOR**
Form to be used – Agreement form will be like the Owner’s sample Form of Agreement included in project documents.

**END OF SECTION 000100**
SECTION 000300 – CONTRACTOR BID FORM

Bid Proposal for:
D231130 – D1 Coeur d’Alene Laboratory Facility
Idaho Transportation Department (ITD)
Coeur d’Alene, Idaho

The Bidder, in compliance with the advertisement for bids for the above project, having examined the bidding and contract documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes all labor, equipment, materials and supplies, and to provide the service and insurance in accordance with the Contract Documents, within the time set forth, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents.

TIME SCHEDULE:

Bidder agrees to complete the work within the time schedule as established by the CM. Basic principles of the project schedule are as follows:

Milestone “Completed By” Dates:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Start on or before</td>
<td>05/06/24</td>
</tr>
<tr>
<td>Building Pad</td>
<td>06/07/24</td>
</tr>
<tr>
<td>Right-of-Way Utilities</td>
<td>06/14/24</td>
</tr>
<tr>
<td>Site Utilities &amp; Electrical</td>
<td>07/19/24</td>
</tr>
</tbody>
</table>

By signing this bid form, bidder acknowledges the above milestone dates and agrees to accomplish their work on or before their respective milestone(s) and within the overall schedule in concert with other trades as directed by the CM.

Bidding Company Name: __________________________________________________________

This bid form applies to bid package number & title:
(a separate bid form for each bid package must be provided)

<table>
<thead>
<tr>
<th>Bid Package No.</th>
<th>Bid Package Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bidder acknowledges receipt of the Addenda No: ________________________________.
(List by Add. Number(s))
BASE PROPOSAL – Laboratory Facility Phase 1: The complete Scope of Work for the Bid Package noted above (Idaho State sales tax is included), for the sum of:

Dollars($________________________)________________________________________

(Amount shall be shown in both figures and words. In case of discrepancy, the amount in words will govern.)

- If a Performance and Payment Bond is requested for the above scope, please list the Bonding Rate Percentage and dollars, that would be applied to the base bid amount:

  Rate %___________  $________________________________________

For contractors bidding on more than one Bid Package a discount may be offered by your firm if both (or more) packages are accepted. Note the discount amount, as applicable, below. The Owner reserves the right to select the combination of separate bids, or a combination of bids with the discount, whichever results in the lowest bid.

List of Bid Packages to combine: _______________________________________

Discount, in dollars, if accepted in combination: $________________________

Bidder understands that the Owner and/or the CM reserves the right to accept or reject any and all bids with or without cause, for any reason determined in its sole subjective determination to be in its best interest and to waive any informality in bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of forty-five (45) calendar days after the scheduled closing time for receiving bids (including alternate items).

The scope of each bid package must be bid in its entirety as a lump sum. Segregated bids will not be accepted. Any qualifications, exceptions, clarifications, or exclusions to one’s bid may disqualify their proposal with exception of the Bid Form Attachment (VE Options items) identified in the Instructions to Bidders Spec Section and as below.

Bid Form Attachment - Bidders are encouraged to provide “Value Engineering Options or Cost Saving Options (VE Options)” in addition to their base bid, on their own form as an attachment to this bid form. ITD will take into consideration the attached VE items in evaluating subcontractor proposals for award. VE Options shall not be included in the Bid Form Base Proposal or Alternate/Optional Numbers and will only be included and identified as an attachment to this Bid Form.
Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract referenced within seven (7) days and deliver Insurance Certificates, P&P Bonds, and Special Condition Forms as required by the Bid Documents.

**Additional Bidder Provisions**

By submitting a bid for this Project, the undersigned bidder agrees that, if awarded, the Contractor will conform to all conditions and requirements of the Contract, Contract Documents and the following additional provisions:

**95% Bona Fide Idaho Residents.** Contractor agrees to comply with conditions pertaining to Sections 44-1001 and 44-1002, Idaho Code, requiring the employment of ninety-five percent (95%) bona fide Idaho residents and providing for a preference in the employment of bona fide Idaho residents and regarding the employment of persons not authorized to work in the United States.

**Certification Concerning Boycott of Israel.** Pursuant to Idaho Code section 67-2346, if payments under the Contract exceed one hundred thousand dollars ($100,000) and Contractor employs ten or more persons, Contractor certifies that it is not currently engaged in, and will not for the duration of the Contract engage in, a boycott of goods or services from Israel or territories under its control. The terms in this section defined in Idaho Code section 67-2346 shall have the meaning defined therein.

**Debarment and Suspension.** In submitting this bid proposal, we hereby certify that we have not been suspended or in any way excluded from procurement actions by any State Agency. We fully understand that if information contrary to this certification subsequently becomes available, such evidence may be grounds for non-award or nullification of a bid contract.

**Anti-Collusion.** In submitting this bid proposal, we hereby certify this proposal was developed and prepared without any collusion with any competing bidder or State employee. The content of this proposal has not been disclosed to any competing or potentially competing bidder prior to the proposal due date and time. Furthermore, no action to persuade any person, partnership or corporation to submit or withhold a bid has been made.

**Equal Employment Opportunity.** In submitting this bid proposal, you certify to the State that your company and the subcontractors you hire will comply with the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a), and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientations, gender identity or national origin. Moreover, these regulations required that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or disability.

**Domestic Procurement Preferences.** In submitting this bid proposal and in accordance with 2 CFR §200.322 Domestic preferences, you certify to the District that your company will, as appropriate and to the extent consistent with law, provide preference for the purchase and use of
goods, products or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products).

The names and addresses of the entities that will perform the work identified below, subject to approval of ITD, if Undersigned is awarded the Contract, are as follows:

**Plumbing**

(Name) 

(Address) 

Idaho Public Works Contractors License No. 

Idaho Plumbing Contractors License No. 

**HVAC**

(Name) 

(Address) 

Idaho Public Works Contractors License No. 

Idaho HVAC Contractors License No. 

**Electrical**

(Name) 

(Address) 

Idaho Public Works Contractors License No. 

Idaho Electrical Contractors License No.

Failure to name a properly licensed contractor in each of the above categories may render the bid unresponsive and void. *Please note that if the above trades do not apply to this bid package, empty lines should be noted as “Not Applicable” or “N/A”.*

The State of Idaho policy prohibits purchase of asbestos products and asbestos containing materials for use in or on any facility, including personal and real property, where acceptable alternatives are available. The contractor certifies by submission of this bid proposal that the products or materials to be furnished as a result of this bid are free of asbestos and hazardous materials.
Execute as part of this bid form:

CONTRACTOR’S AFFIDAVIT
CONCERNING ALCOHOL AND DRUG-FREE WORKPLACE

STATE OF ______________________
COUNTY OF ______________________

Pursuant to the Section 72-1717, Idaho Code, I, the undersigned, being duly sworn, deposite and certify that ________________________________ is in compliance with the provisions of Section 72-1717, Idaho Code; that ________________________________ provides a drug-free workplace program that complies with the provisions of Title 72, Chapter 17, Idaho Code, and will maintain such program throughout the life of a state construction contract; and that ________________________________ shall subcontract Work only to subcontractors meeting the requirements of Section 72-1717(1)(a), Idaho Code.

Name of Contractor

________________________________________
Address

City and State

By: ________________________________
   (Signature)

Subscribed and sworn to before me this _____________________ day of ______________________, ________.

________________________________________
NOTARY PUBLIC
Residing at: ______________________________

Commission expires: ______________________

FAILURE TO EXECUTE THIS AFFIDAVIT AND SUBMIT IT ALONG WITH YOUR BID SHALL MAKE YOUR BID NON-RESPONSIVE.
This Executed Bid Form shall be an attachment to the Contract. The Undersigned notifies that he is of this date duly licensed as an Idaho Public Works Contractor and further that he possesses the following as applicable:

Idaho **Public Works** License: ___________________________ Exp. Date:______________

Idaho **Contractor Registration**: ___________________________

Dated this __________ day of _________________, ________________.
(date) (month) (year)

Respectfully Submitted,

By: ______________________________________________________
(Company)

________________________________________________________
(Business Address)

________________________________________________________
(Authorized Signature)

________________________________________________________
(Printed Name & Title)

________________________________________________________
(Email Address)

________________________________________________________
(Telephone) (Fax Number)

PLEASE NOTE:
- All bids are to be submitted in a sealed properly labeled envelope
- No lines are to be left blank (NA or “Not Applicable” may be used to complete empty lines)
- Bid Bond included at a rate of 5% of the total bid

END OF SECTION 000300
SECTION 000600 – SPECIAL CONDITIONS

Table of Contents

1.0 Prime Contracts
1.1 Prime Contracts will be issued directly, by Idaho Transportation Department (ITD), for each of the Bid Packages identified in specification section 000031. ITD has retained a CM Agent (Bateman-Hall, Inc.) to help coordinate the management of the overall project.

1.2 Each Prime Contractor (Contractor) will be required to cooperate and coordinate with the CM and all other Contractors to perform their work in accordance with a Master Project Schedule developed, updated, and maintained by the CM.

2.0 Bid (Scope) Packages
2.1 The scope of each bid package must be bid in its entirety. Any qualifications, exceptions, clarifications, or exclusions to one’s bid may disqualify their proposal with exception of the VE Options items identified on the Bid Form and in the Instructions to Bidders Spec Section 000100.

2.2 The scope of work in each bid package will become part of the bidder’s contract. All Contractors will be accountable for the following requirements:

3.0 Site Access, Security, Rules & Regulations
3.1 All visitors sponsored by the Owner, Architect/Engineer, CM, Contractor, Subcontractors, or Unions must check in with the CM and must follow all project rules and regulations. Each Contractor is to keep a strict attendance list of who is approved to be on site and when they are on site.
3.2 Any unauthorized personnel on site will be considered as a trespasser, and the appropriate authorities will be contacted. Unauthorized personnel are defined as any and all people not previously approved to be on site by the CM/ITD. Last Contractor on site each day is responsible for complete project lock-up.

3.3 A normal work week for this project will consist of a 40-hour Monday-Friday work schedule. Any time required by a contractor outside of a normal work week will require a 48-hour advanced notification. The CM Supervision required for work outside of the normal work week timeframe will be billed to the requesting contractor at a rate of $200/HR for each Supervisor necessary.

4.0 Temporary Services
4.1 Services provided by the Construction Manager will consist of the following: Temporary sanitary facilities, temporary power to central locations only, and dumpsters for miscellaneous construction debris only. Temporary general building lighting will be provided (under the Electrical Package) but trade specific task lighting will be by each contractor.

4.2 Large amounts of construction debris such as concrete, masonry block, demolition work, pallets, boxes, and other large packaging materials will be the contractor’s responsibility to provide proper disposal of into their own containment systems whether on-site or off-site.

5.0 Material Handling, Parking & Scaffolding
5.1 All Contractors will be fully responsible for their own materials. This includes the off-loading, relocating, storage, protection, security, etc. For on-site storage, the CM’s superintendent is to be notified prior to the arrival of all materials for coordination of the laydown area. All deliveries are to be coordinated in the CM Weekly Coordination meetings.

5.2 The CM and/or ITD is not responsible for unloading material. A $500/HR minimum fee will be back charged to all Contractors and/or Suppliers not performing their own unloading.

5.3 All off-site storage will need to be kept in a bonded and certified warehouse, inspected by the CM and/or owner and properly labeled prior to payment.

5.4 Parking areas are to be coordinated with the CM. Parking may be limited and the CM & Owner are not responsible for lost, damaged or stolen material, equipment, vehicles, etc.

5.5 Each Contractor is responsible to provide hoisting, vertical transportation, and scaffolding necessary to complete Contractor’s work. Unless agreed to in writing, any hoisting, vertical transportation, or scaffolding is not to be shared.

6.0 Weather Protection (Heat & Cover)
6.1 Any heating, covering, and/or snow removal required to properly perform contracted work will be the responsibility of the Contractor. Bid accordingly as these costs are expected to be part of Contractor’s bid for their own work for all exterior finishes.

6.2 Heating of the building once enclosed will be addressed by the CM.

7.0 Clean Up
7.1 Daily clean-up is a must for all Contractors. A clean project is a safe and productive site. All construction debris must be placed in garbage cans or dumpster at the end of each workday and areas where work was performed is to be cleared and swept.
7.2 Contractors that fail to keep up on their clean-up will be billed at a rate of $500/HR minimum fee to have this work completed for them by crews of the Construction Manager’s choosing.

8.0 Safety
8.1 Each Contractor will be required to hold a weekly safety meeting with their own personnel and provide a copy of the meeting minutes to the CM’s Superintendent. Each Contractor will be required to provide a copy of their safety manual to the CM’s Superintendent, which will be maintained in the onsite job trailer. Each Contractor’s Foreman will be required to attend a weekly safety meeting held by the CM’s Superintendent.

8.2 The Contractor shall implement appropriate safety measures pertaining to their work and the project, including required training, documentation, certification, establishing safety rules, posting appropriate warnings and notices, erecting safety barriers, establishing proper notice procedures and implementing and maintaining a drug and alcohol-free workplace program to protect persons and property at the site and adjacent to the site from injury, loss, or damage.

8.3 The Contractor is required to designate an individual at the site in the employ of the Contractor who shall act as the Contractor’s designated safety representative with a duty to prevent accidents. Unless otherwise identified by the Contractor in writing, the designated safety representative and the competent person for the work shall be Contractor’s project foreman.

8.4 Before commencing work on the project, a Job Hazard Analysis (JHA’s) will be required by all Contractors for their scopes of work. Each JHA will be turned into the CM’s Superintendent and approved prior to the start of that scope of work. JHA’s shall include, as a minimum, Contractors work activities, the hazards associated with the activities and how each activity hazards will be safely addressed in both PPE requirements and course of actions. Documented training forms shall accompany each JHA assuring that all personnel working have been trained for the associated hazards involved.

8.5 Contractors shall require all employees and sub tier employees to wear proper construction attire entailing hard hats and bright colored shirts or vests when on the job site, as a minimum.

8.6 Each Contractor will be required to provide MSDS (Material Safety Data Sheets) for all products that may be used for their work.

8.7 If hazardous substances of a type of which an employer is required by law to notify its employees are being used on the site by the Contractor, the Contractor’s sub-subcontractors or anyone directly or indirectly employed by them, the Contractor shall, prior to harmful exposure of any employees on the site to such substance, give written notice of their hazardous communications plan as well as all MSDS pertaining to the project to the Contractor in sufficient detail and time to permit compliance with the law.

8.8 The Contractor shall give prompt written notice to the Contractor of:
8.8.1 any accident involving bodily injury requiring a physician’s care,
8.8.2 any property damage exceeding Five Hundred Dollars ($500.00) in value, or
8.8.3 any failure that could have resulted in serious bodily injury, whether or not such an injury was sustained.

8.9 A detailed written report shall be furnished if requested by the CM.

8.10 Prevention of accidents at the site is the responsibility of all persons and entities at the site. Establishment of a safety program by the CM shall not relieve the Contractor or other parties of their
safety responsibilities. The Contractor shall establish its own safety program implementing safety measures, policies and standards conforming to those required or recommended by governmental and quasi-governmental authorities having jurisdiction and by the CM and Owner, including, but not limited to, requirements imposed by the Subcontract Documents.

8.11 The Contractor shall comply with the reasonable recommendations of insurance companies having an interest in the Project.

8.12 The Contractor shall stop any part of the contract work which the contractor deems unsafe until corrective measures satisfactory to the CM shall have been taken. The CM’s failure to stop the Contractor’s unsafe practices shall not relieve the Contractor of the responsibility therefor.

8.13 Contractor agrees to comply in all respects with federal, state and local law applicable to the prosecuting of Work under this Agreement, including such specific laws to which Contractor is bound by the Contract Documents. Such compliance shall include, but not be limited to, the maintenance of a drug-free and alcohol-free workplace as such laws and others may apply. Contractor’s failure to comply with federal, state and local law applicable to the prosecution of Work under this Agreement shall be grounds for withholding of payment and/or termination for default of this Agreement. Compliance will be strictly enforced.

8.14 Use of telephones can be a distraction to the safe performance of the Work. Use of telephones for personal use – including mobile phones – is prohibited on the jobsite during work time.

8.15 Listening to music can be a distraction to the safe performance of the Work. Listening to music is prohibited on the jobsite during work time.

8.16 All traffic control; signage; barricading, etc. as required to perform work is the responsibility of the Contractor performing the work.

8.17 All Contractors are strongly encouraged to familiarize themselves with OSHA’s Silica Dust Requirements. Compliance will be strictly enforced.

8.18 COVID-19 safe work requirements may be anticipated for this project. Current guidelines for safe work practices implemented by local, state, and federal jurisdictions will be followed and adhered to at the jobsite and may be subject to change as each of the aforementioned jurisdiction requirements change throughout the timeline of the project. Each Contract will be required to comply.

8.19 Any OSHA fines levied against the CM and/or the Owner as a result of a Contractor’s actions or inactions will be treated as a deductive change order to that Contractor’s contract amount.

9.0 Drug & Alcohol Policy

9.1 Drug and Alcohol Abuse at the job site will not be tolerated. Drug and Alcohol Abuse means being under the influence of illegal drugs and/or alcohol while at the job site; it also means being at the job site while in the possession of illegal drugs.

9.2 Workers who engage in Drug and Alcohol Abuse at the job site jeopardize the safety of themselves and other workers. Contractor shall be responsible for the investigation and, if necessary, discipline of its employee(s) who are suspected of Drug and Alcohol Abuse.
9.3 If a contractor foreman cannot be found, Contractor grants CM’s superintendent with the authority to dismiss that worker from the site until Contractor’s foreman is located and Contractor can conduct its investigation.

10.0 Storm Water Pollution Prevention
10.1 The Site Contractor will have primary responsibility to implement and maintain the storm water pollution prevention plan. However, each Contractor will also be held responsible to obey and abide by all EPA regulations and SWPPP specific for this project. Any damage by a Contractor to the installed protection systems will be the responsibility of the Contractor involved to correct or replace. Each Contractor will be required to attend a SWPPP pre-construction meeting and to sign a SWPPP certification form prior to working on site.

11.0 Supervision
11.1 Each Contractor is required to have a competent on-site Supervisor or Foreman approved by the CM’s superintendent. The on-site Supervisor is to be present on-site for all work performed for the Contractor’s bid package. This Supervisor must be able to competently address day-to-day issues and be in contact daily with the CM’s Superintendent. Once approved, this person cannot be changed without prior approval from the CM’s Superintendent.

12.0 Weekly Progress Meetings
12.1 All Contractors working on the site will be required to attend a weekly coordination meeting in the CM’s on-site office. These meetings will be essential for scheduling day-to-day work activities and coordination with the other Contractors working on the project. Each weekly meeting will also discuss project safety and storm water pollution prevention.

13.0 Schedule
13.1 Time is of the essence for this project. All bids shall be based on the ability to meet the schedule, supply required material, manpower, supervision, and equipment and coordinate with other trades. Your bid proposal shall include any required or needed lead times and special durations for review. Any additional material, labor, supervision, equipment, coordination, and material escalation fees are to be included in bid. All additional costs to accelerate work, material deliveries, or equipment to meet the schedule shall be included in the bid.

13.2 Each Prime Contractor will be required to provide specified scheduling information necessary to maintain the Master Project Schedule and to meet the milestone completion dates as identified on the Bid Form and in each Prime Contract.

13.3 Further coordination and scheduling between Contractors, Suppliers and the CM is required to produce an acceptable schedule to the Owner. Contractor shall guarantee that they will meet all schedule objectives as stated on the bid form; in the master construction schedule; short term look-ahead schedules; coordination meetings; and other written notices.

13.4 The overall schedule of the project will be maintained and updated regularly in the CM’s job site trailer. Schedules will not be sent out to individual Contractors. Project Milestone dates have been included on the Bid Form and are the primary basis for completion dates of selected aspects of the project. Sequencing of the project may be such that Contractors should anticipate multiple mobilizations for their scope of work.

13.5 Each Contractor will be required to keep up with the schedule, which will be discussed during each weekly progress meeting. Contractors that fall behind schedule will be required to take necessary and timely action to improve work progress as per the General Conditions. This action may require
increased work forces, extra equipment, extra shifts, or other actions. Should the Contractor refuse or neglect to take action, the CM may take necessary action at the Contractor’s expense. No time extensions will be given for weather delays.

13.6 Contractors and Suppliers will be strongly encouraged to order materials upon submittal approval to avoid any delays in the supply chain. Coordinate onsite/offsite storage with the CM.

13.7 The owner reserves the right to assess Costs for Damage and/or Recovery to any or all Contractors’ who are unable to maintain the project schedule.

13.8 Those that can’t meet the project schedule should not bid this project.

14.0 Changes/Proposal Requests

14.1 The Scope of Work shall be subject to change by additions, deletions or revisions thereto by the Owner and/or CM. Contractor will be notified of such changes by receipt of additional and/or revised drawings, specifications, exhibits or other written notification.

14.2 If, upon receipt of any notification, Contractor considers that a change is involved that could affect its costs of performing the work or upon the schedule for performance of the work, Contractor is obligated to inform CM in a timely manner and within the timeframe stated within the Contract.

14.3 Contractor shall submit to CM within (5) working days after submission of the notification from CM a detailed takeoff with supporting calculations, documentation and pricing for the change, together with any requested adjustments in the schedule.

14.4 The pricing shall be itemized and shall be in enough detail to permit a detailed analysis of all labor, material and equipment and shall cover all work involved in the change whether such work was deleted, added or modified. Amounts related to subtier/vendor shall be supported in similar detail.

14.5 Lump Sum single price changes will not be accepted.

14.6 Acceptable detail will consist of the following single line items, as they apply to each item identified in the change, supported by the following clear and concise detailed cost information:

14.6.1 Direct Hourly Labor Costs
14.6.2 Direct Material & Equipment Costs
14.6.3 Rental Equipment/Subcontractor Owned Equipment Costs
14.6.4 Subtier/Vendor Costs
14.6.5 Subtotal of the Above
14.6.6 Idaho State Sales/Use Tax
14.6.7 Allowable Mark Ups
14.6.8 Total Proposal Cost

14.7 These items shall be summarized on a Contractor front cover letter to the CM for each change/proposal request. All changes shall be presented in round dollars with no cents.

15.0 Testing & Inspections

15.1 The Owner will retain the services of a Testing Agency to perform testing, special inspections, & document compliance for soils, concrete, and structural steel. Costs of corrective action or retesting due to unsatisfactory work will be the sole responsibility of the Contractor.
15.2 State and local required inspections, outside of the above, shall be by the Contractor. Results shall be forwarded to the CM upon receipt.

15.3 Frontline inspections and quality control procedures remain the direct responsibility of each Contractor for their scope of work.

16.0 Permits & Licensing
16.1 The Owner will purchase the general building permit. All other permits & fees (state, local or other) will be the responsibility of the Contractors and are to be included in their proposals.

16.2 All Contractors will be required to have an Idaho Public Works Contractors License and Idaho Contractor’s license prior to bidding this project.

17.0 Submittals, O&M Manuals and As-Built Drawings
17.1 All submittals need to be submitted to the CM’s office within 20 days after contract award. All Contractors will be required to e-mail submittals in a digital organized format. Faxed or disorganized submittals will not be accepted. Samples will need to be mailed to the B-H office.

17.2 O&M manuals are not to wait until project completion. These are to be submitted as early on in the project as possible. One hard copy and one digital copy will be required. Organization is a must. Warranties will need to be submitted with O&M manuals, and all warranty periods will not begin until substantial completion as noted in the documents.

17.3 Each Contractor is to maintain a set of as-built drawings for their scope of work. This will also need to be updated in the CM’s on-site job trailer on a regular basis. The CM may ask to review a Contractor’s as-buils at any time, and if found deficient, Contractor’s payment may be held. Be sure to closely review the specifications for submittal and O&M requirements.

18.0 Taxes
18.1 All Contractors and Suppliers are responsible to pay Idaho State sales tax. Sales tax is to be included in their base bid proposal. No change orders will be given for sales tax.

18.2 The Contractors Tax Affidavit included in spec section 000816 will need to be completed as a close-out item prior to any release of retainage.

19.0 Survey & Layout
19.1 The CM shall provide and maintain well-built batter boards at the major building corners and shall establish and safeguard benchmarks in at least two widely separated places. As the work progresses, the CM will establish major building grids only as a guide for other trades.

19.2 All other surveying and layout shall be the responsibility of each Contractor. The cost to provide these services shall be included as part of each Contractor’s base bid cost.

19.3 Contracts to specifically include these services (but are not limited to) are Earthwork, Potable Water Systems, Sanitary Sewage Systems, Fire Water Systems, Storm Sewage Systems and Irrigation Pipe, Asphalt Paving, Portland Cement Concrete Paving, Cast in Place Concrete, Unit Masonry Assemblies, Structural Steel, Framing, Gypsum Board Assemblies, Door and Window, Aluminum Entrances and Storefronts, Plumbing, Mechanical and Electrical subcontractors.
20.0 **Qualifications of Personnel**

20.1 Contractor shall be responsible for selecting personnel who are well qualified to perform the required Work.

20.2 All Contractor personnel entering the project shall conform to all security regulations and other regulations, rules and law which may be in effect during the period of this Agreement.

20.3 Contractor shall promptly comply with CM’s and/or ITD’s request to remove from the worksite any worker performing work on behalf of the Contractor who is found to be in violation of the terms of this Agreement.

20.4 At all times during the performance of this Agreement and until the Work is completed and accepted, Contractor shall directly supervise its work through a competent on-site foreman who is satisfactory to the CM and who has authority to act for the Contractor.

20.5 Subcontractor agrees that its on-site foreman shall continue to act as such until Contractor’s work is complete and accepted and may not be removed from working on this project without the prior written consent of the CM.

20.6 Contractor agrees that failure of its on-site foreman to attend the weekly Superintendent Coordination Meeting and Safety Meeting will make it subject to the terms of default specified in this Agreement.

21.0 **Warranty**

21.1 Specific warranty requirements are covered in the specifications and contract documents. It noted here that all warranties will not start before the Substantial Completion Date. The Substantial Completion Date will be the starting point of warranties.

22.0 **Right of Joint-Check Payment**

22.1 ITD, at its option, may make any payment due by check payable jointly to Contractor and any of its Subcontractors or suppliers who have performed Work or furnished materials under this Agreement.

23.0 **Slab Protection**

23.1 No satisfactory chemical or cleaning procedure is available to remove petroleum stains from the concrete surface. Prevention is therefore essential. In addition to the food and drink requirements already noted in section 5.3 above, **It shall be the responsibility of all trades to protect the exposed floor slabs** by adhering to the following requirements:

23.1.1 Protect all slabs or finish surfaces from any and all damage. Protect any adjacent surfaces from any damage from work activities.

23.1.2 All hydraulic powered equipment must be diapered and have white non-marking tires to avoid staining of the concrete.

23.1.3 No trade will park vehicles on any inside slabs. If necessary, to complete their scope of work, drop cloths will be placed under vehicles at all times.

23.1.4 No pipe cutting machine will be used on any inside floor slabs.

23.1.5 Steel will not be place on interior slab to avoid rust staining.
23.1.6 Fire line testing (or any other waterline testing) will not be permitted directly onto any slabs or sidewalks.

24.0 ITD Facility Operations

24.1 The ITD Facility will remain in operation during the construction of this project. ITD personnel will remain active with daily yard duties in and out of onsite facilities and each Contractor is expected to work in harmony with ITD operations.

END OF SECTION 000600
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SECTION 000710 – EMPLOYMENT PRACTICES

GENERAL: Provisions of the Contract, including General and Special Conditions and other Division 0 Specification Sections, apply to this Section.

EQUAL EMPLOYMENT OPPORTUNITY: During the performance of this Contract each Subcontractor agrees as follows:

1) They will not discriminate against any employee or applicant for employment because of race, creed, color or national origin. They will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2) Each Subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the Subcontractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color or national origin.

3) The Subcontractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other Contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Subcontractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4) The Subcontractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.

5) The Subcontractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations and order of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

6) In the event of the Subcontractor's noncompliance with the nondiscrimination clauses of this Contract, or with any of such rules, regulations, or orders, this Contract may be cancelled, terminated or suspended in whole or in part and the Subcontractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as Idaho Falls Event Center 000710 Employment Practices provided Executive Order No. 11246.
of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor or as otherwise provided by law.

7) The Subcontractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Subcontractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Subcontractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Subcontractor may request the United States to enter into such litigation to protect the interest of the United States.

END OF SECTION 000710
AIA® Document A132™ – 2019

Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition

AGREEMENT made as of the {Day} day of {Month} in the year 2024

BETWEEN the Owner:

State of Idaho Transportation Department
11331 W Chinden Blvd
Boise, ID 83714
208-334-8000

and the Contractor:

{Contractor's Company Name}
{Physical Address}
{Physical City, State Zip}
{Office Phone}
{Email}

Contract Number: {FMXXXXX}

for the following Project:

ITD D1 Coeur d’Alene New Testing Laboratory
Project Number: D231130
600 W. Prairie Ave.
Coeur d’Alene, ID 83814

The Construction Manager:

Bateman-Hall, Inc.
1405 Foote Drive
Idaho Falls, ID 83402
208-523-2681

The Architect:

Miller Stauffer Architects
601 E. Front Ave. Ste. 201
Coeur d’Alene, ID 83814
208-664-1773

The Owner and Contractor agree as follows.
TABLE OF ARTICLES
1 THE CONTRACT DOCUMENTS
2 THE WORK OF THIS CONTRACT
3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION
4 CONTRACT SUM
5 PAYMENTS
6 DISPUTE RESOLUTION
7 TERMINATION OR SUSPENSION
8 MISCELLANEOUS PROVISIONS
9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS
EXHIBIT B ENUMERATION OF PLANS AND SPECS

ARTICLE 1 THE CONTRACT DOCUMENTS
The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT
The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. Work to include: [Bid Package Scope Description]

ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION
§ 3.1 The date of commencement of the Work shall be:

Commencement date is in accordance with Bid Form Milestone Schedule.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion of the Project or Portions Thereof
§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be:

Substantial Completion in accordance with Bid Form Milestone Schedule.

§ 3.4 When the Work of this Contract, or any Portion Thereof, is Substantially Complete
§ 3.4.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall substantially complete the entire Work of this Contract:

Substantial Completion in accordance with Bid Form Milestone Schedule.

§ 3.4.3 If the Contractor fails to substantially complete the Work of this Contract, or portions thereof, as provided in this Section 3.4, liquidated damages, if any, shall be assessed as set forth in Section 4.5.
ARTICLE 4 CONTRACT SUM
§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor’s performance of the Contract. The Contract Sum shall be one of the following:

(Check the appropriate box.)

☐ Stipulated Sum, in accordance with Section 4.2 below
☐ Cost of the Work plus the Contractor’s Fee, in accordance with Section 4.3 below
☐ Cost of the Work plus the Contractor’s Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below.)

§ 4.2 Stipulated Sum
§ 4.2.1 The Contract Sum shall be [Written Price], subject to additions and deductions as provided in the Contract Documents.

§ 4.2.2 Alternates
§ 4.2.2.1 Alternates, if any, included in the Contract Sum:

[Accepted Alternates]

[Paragraph Deleted]

§ 4.2.3 Allowances, if any, included in the Contract Sum:

[Allowances]

§ 4.2.4 Unit prices, if any:

[Unit Prices]

§ 4.3 Cost of the Work Plus Contractor’s Fee without a Guaranteed Maximum Price
[Section Deleted due to this being a Stipulated Sum Contract]

§ 4.4 Cost of the Work Plus Contractor’s Fee with a Guaranteed Maximum Price
[Section Deleted due to this being a Stipulated Sum Contract]

§ 4.5 Liquidated damages, if any:

Liquidated Damages are in accordance with the Special Conditions of this contract.

§ 4.6 Other:
[Section Deleted]

ARTICLE 5 PAYMENTS
§ 5.1 Progress Payments
§ 5.1.1 Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and Certificates for Payment issued by the Construction Manager and Architect, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the
§ 5.1.3 Applications for Payment are due to the Construction Manager not later than the 20th day of a month. The Owner shall make payment of the certified amount in the Application for Payment to the Contractor according to Idaho Code 67-2302.

§ 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum

§ 5.1.4.1 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor’s Applications for Payment.

§ 5.1.4.2 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.4.3 In accordance with AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.4.3.1 The amount of each progress payment shall first include:
.1 That portion of the Contract Sum properly allocable to completed Work;
.2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
.3 That portion of Construction Change Directives that the Architect determines, in the Architect’s professional judgment, to be reasonably justified.

§ 5.1.4.3.2 The amount of each progress payment shall then be reduced by:
.1 The aggregate of any amounts previously paid by the Owner;
.2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
.3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
.4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019; and
.5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.5 Progress Payments Where the Contract Sum is Based on the Cost of the Work without a GMP

[Section Deleted due to this being a Stipulated Sum Contract]

§ 5.1.6 Progress Payments Where the Contract Sum is Based on the Cost of the Work with a GMP

[Section Deleted due to this being a Stipulated Sum Contract]

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

Retainage will be Five Percent (5%) for Work completed and material suitably stored. Contractor agrees to withhold no more than Five Percent (5%) from its lower tier subcontractors and suppliers. Retainage cannot be released until after substantial completion and all contractual obligations and project closeout document requirements have been
§ 5.1.7.1 The following items are not subject to retainage:

- NA

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

No reduction in retainage will be allowed prior to final completion without written approval of the Owner.

[Paragraph Deleted]

§ 5.2 Final Payment

§ 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum

Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

1. the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Section 12.2 of AIA Document A232–2019, and to satisfy other requirements, if any, which extend beyond final payment; and

2. a final Certificate for payment or Project Certificate for Payment has been issued by the Architect; such final payment shall be made by the Owner after the issuance of the final Certificate for Payment or Project Certificate for Payment, pursuant to the provision of Idaho Code 67-2302.

§ 5.2.1.2 The Owner’s final payment to the Contractor shall be made according to Idaho Code 67-2302.

§ 5.2.2 Final Payment Where the Contract Sum is Based on the Cost of the Work with or without a GMP

[Section Deleted due to this being a Stipulated Sum Contract]

§ 5.3 Payments due and unpaid under the Contract shall bear interest from the date payment is due according to Idaho Code 67-2302.

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232–2019, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.

§ 6.2 Binding Dispute Resolution

[Section Deleted]

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 Where the Contract Sum is a Stipulated Sum

The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232–2019.

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A232–2019, then the Owner shall pay the Contractor a termination fee as follows:

The Contractor shall be compensated for any and all costs to date and equitable OH&P for the scope of work completed prior to termination.

§ 7.1.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019

[Section Deleted due to this being a Stipulated Sum Contract]
§ 7.3 Suspension
The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019; in such case, the Contract Sum and Contract Time shall be increased as provided in Article 14 of AIA Document A232–2019, except that the term “profit” shall be understood to mean the Contractor’s Fee as described in Section 4.3.2 or 4.4.2, as applicable, of this Agreement.

ARTICLE 8 MISCELLANEOUS PROVISIONS
§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A232–2019 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

<table>
<thead>
<tr>
<th>§ 8.2 The Owner’s representative:</th>
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<tbody>
<tr>
<td>Tony Pirc</td>
</tr>
<tr>
<td>ITD Facility Project Mgr.</td>
</tr>
<tr>
<td>PO Box 11</td>
</tr>
<tr>
<td>Boise, ID 83707</td>
</tr>
<tr>
<td>208-334-8000</td>
</tr>
<tr>
<td><a href="mailto:tony.pirc@itd.idaho.gov">tony.pirc@itd.idaho.gov</a></td>
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<thead>
<tr>
<th>§ 8.3 The Contractor’s representative:</th>
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<td>TBD</td>
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</table>

| § 8.4 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party. |

§ 8.5 Insurance and Bonds

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A132™–2019, Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A232–2019, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

Distribution of electronic documents (Submittals, Modifications, Project Payment Documents, Plans, Specifications, etc.) will be through a combination of Construction Manager’s collaboration website/program and electronic mail. No free-of-charge hard copy sets of Drawings and/or Project Manuals will be provided to Contractors.

§ 8.7 Relationship of the Parties
[Section Deleted due to this being a Stipulated Sum Contract]

§ 8.8 Other provisions:

§ 8.8.1 The work shall strictly comply with all federal, state, local and municipal laws, rules, regulations, statutes, ordinances and other directives (hereinafter referred to as “Laws”), applicable to the Work on the Project, including, but not limited to, labor, wage, equal opportunity employment, environmental and safety Laws. All work, in addition to that specifically required by this Contract but necessary to fully comply with such Laws, will be furnished by Contractor as part of this Contract without additional compensation. In the event Contractor observes any work on the
Project, which Contractor believes is not in compliance with such Laws, Contractor shall immediately notify Owner and Construction Manager in writing of such non-compliance.

§ 8.8.2 Contractor agrees not to assign or sublet Contract or the Work or any right to payment or other Contract right or portion of the Work without the prior written consent of the Owner and Construction Manager.

§ 8.8.3 Contractor hereby certifies that it has an established safety policy as required by the Occupational, Safety and Health Administration (OSHA), which requires regular safety meetings. Contractor agrees to conduct or attend weekly safety meetings regarding its Work under this agreement and shall promptly prepare minutes of such meetings and provide copies of such minutes to Contractor as the Work progresses. Contractor agrees to comply with all requirements of OSHA relating to the Work and shall maintain and provide all applicable material safety data sheets and safety manuals in accordance with OSHA requirements.

§ 8.8.4 All materials delivered by or on account of Contractor and intended to be incorporated into the Project shall become property of the Owner when delivered to the Work Site, but Contractor may repossess himself of any surplus remaining at the completion of the Work of this Contract. All scaffolding, apparatus, tools, equipment, machinery and plans brought onto the Work Site by the Contractor shall be responsible for the continuous quality control of the Work, protection of the Work and other work at the site and for cleanup and maintenance of the site of the Work. Construction Manager may, at any time, require removal and replacement of Contractor’s project supervisor and Contractor shall be liable for any costs, including overhead costs, incurred by Construction Manager in assuring or maintaining quality control of the Work.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

.1 AIA Document A132™ – 2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition

.2 AIA Document A132™ – 2019, Exhibit A, Insurance and Bonds Exhibit

.4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

   NA

.5 Drawings

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Date</th>
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<tbody>
<tr>
<td></td>
<td>See Exhibit B - Enumeration of Plans and Specifications</td>
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</table>

.6 Specifications

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<th>Title</th>
<th>Date</th>
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<tbody>
<tr>
<td></td>
<td>See Exhibit B - Enumeration of Plans and Specifications</td>
<td></td>
</tr>
</tbody>
</table>

.7 Addenda, if any:

[Addenda & Dates]

[Paragraph Deleted]

.8 Other Exhibits: [Subsection Information Deleted]

Exhibit B - Enumeration of Plans and Specifications

.9 Other documents, if any, listed below:

- Contractor’s Executed Bid Form
- Contractor’s Executed Performance & Payment Bonds

This Agreement entered into as of the day and year first written above.

State of Idaho Transportation Department

(Contractor’s Company Name)

(Signature) (Signature)
This Insurance and Bonds Exhibit is part of the Agreement, between the Owner and the Contractor, dated the [Day] day of [Month] in the year 2024.
(In words, indicate day, month and year.)

for the following PROJECT:
(Name and location or address)

ITD D1 Coeur d'Alene New Testing Laboratory
Project Number: D231130
600 W. Prairie Ave.
Coeur d'Alene, ID 83814

THE OWNER:
(Name, legal status and address)

State of Idaho Transportation Department
11331 W Chinden Blvd
Boise, ID 83714
208-334-8000

THE CONTRACTOR:
(Name, legal status, and address)

{Contractor's Company Name}
{Physical Address}
{Physical City, State Zip}
{Office Phone}
{Email}

Contract Number: {FMXXXXX}

TABLE OF ARTICLES

A.1 GENERAL
A.2 OWNER’S INSURANCE
A.3 CONTRACTOR’S INSURANCE AND BONDS
A.4 SPECIAL TERMS AND CONDITIONS

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revision to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A232™-2019, General Conditions of the Contract for Construction, Article 11 of A232™-2019 contains additional insurance provisions.
ARTICLE A.1 GENERAL
The Owner and Contractor shall purchase and maintain insurance, and provide bonds, as set forth in this Exhibit. As used in this Exhibit, the term General Conditions refers to AIA Document A232™–2019, General Conditions of the Contract for Construction.

ARTICLE A.2 OWNER’S INSURANCE
§ A.2.1 General
Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Article A.2 and, upon the Contractor’s request, provide a copy of the property insurance policy or policies required by Section A.2.3. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.

§ A.2.2 Liability Insurance
The Owner shall be responsible for purchasing and maintaining the Owner’s usual general liability insurance.

§ A.2.3 Required Property Insurance
[Paragraph Deleted]
[Paragraph Deleted]
[Paragraph Deleted]
[Paragraph Deleted]

§ A.2.3.1.4 Deductibles and Self-Insured Retentions. If the insurance required by this Section A.2.3 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.

§ A.2.3.2 Occupancy or Use Prior to Substantial Completion. The Owner’s occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section A.2.3.1 have consented in writing to the continuance of coverage. The Owner and the Contractor shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

§ A.2.3.3 Insurance for Existing Structures
If the Work involves remodeling an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, “all-risks” property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage from the causes of loss identified in Section A.2.3.1, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.

§ A.2.4 Optional Extended Property Insurance.
[Section Deleted Due To Inapplicability]

§ A.2.5 Other Optional Insurance.
[Section Deleted Due To Inapplicability]

ARTICLE A.3 CONTRACTOR’S INSURANCE AND BONDS
§ A.3.1 General
§ A.3.1.1 Certificates of Insurance. The Contractor shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article A.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner’s written
request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section A.3.2.1 and Section A.3.3.1. The certificates will show the Owner as an additional insured on the Contractor’s Commercial General Liability and excess or umbrella liability policy or policies.

§ A.3.1.2 Deductibles and Self-Insured Retentions. The Contractor shall disclose to the Owner any deductible or self-insured retentions applicable to any insurance required to be provided by the Contractor.

§ A.3.1.3 Additional Insured Obligations. To the fullest extent permitted by law, the Contractor shall cause the commercial general liability coverage to include (1) the Owner, the Architect and the Architect’s consultants, and the Construction Manager and the Construction Manager’s consultants, as additional insureds for claims caused in whole or in part by the Contractor’s negligent acts or omissions during the Contractor’s operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor’s negligent acts or omissions for which loss occurs during completed operations. The additional insured coverage shall be primary and non-contributory to any of the Owner’s general liability insurance policies and shall apply to both ongoing and completed operations. To the extent commercially available, the additional insured coverage shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 07 04, CG 20 37 07 04, and, with respect to the Architect and the Architect’s consultants, and the Construction Manager and the Construction Manager’s consultants, CG 20 32 07 04.

§ A.3.2 Contractor's Required Insurance Coverage
§ A.3.2.1 The Contractor shall purchase and maintain the following types and limits of insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2.

§ A.3.2.2 Commercial General Liability
§ A.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than One Million Dollars ($1,000,000.00) each occurrence, Two Million Dollars ($2,000,000.00) aggregate, and Two Million Dollars ($2,000,000.00) aggregate for products-completed operations hazard, providing coverage for claims including

1. damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
2. personal injury and advertising injury;
3. damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
4. bodily injury or property damage arising out of completed operations; and
5. the Contractor’s indemnity obligations under Section 3.18 of the General Conditions.

§ A.3.2.2.2 The Contractor’s Commercial General Liability policy under this Section A.3.2.2 shall not contain an exclusion or restriction of coverage for the following:

1. Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
2. Claims for property damage to the Contractor’s Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
3. Claims for bodily injury other than to employees of the insured.
4. Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
5. Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
6. Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
7. Claims related to residential, multi-family, or other habitational projects, if the Work is to be performed on such a project.
8. Claims related to roofing, if the Work involves roofing.
Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.

Claims related to earth subsidence or movement, where the Work involves such hazards.

Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

§ A.3.2.3 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than One Million Dollars ($1,000,000.00) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles along with any other statutorily required automobile coverage.

§ A.3.2.4 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella insurance policies result in the same or greater coverage as the coverages required under Section A.3.2.2 and A.3.2.3, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ A.3.2.5 Workers’ Compensation at statutory limits.

§ A.3.2.6 Employers’ Liability with policy limits not less than One Million Dollars ($1,000,000.00) each accident, One Million Dollars ($1,000,000.00) each employee, and One Million Dollars ($1,000,000.00) policy limit.

§ A.3.2.7 Jones Act, and the Longshore & Harbor Workers’ Compensation Act, as required, if the Work involves hazards arising from work on or near navigable waterways, including vessels and docks

§ A.3.2.8 The Contractor agrees to indemnify, hold harmless and, not excluding the State of Idaho’s right to participate, defend the State of Idaho its subsidiary, parent, associated and/or affiliated entities, successors, or assigns, its elected officials, trustees, employees, agents, volunteers, and any jurisdiction or agency issuing permits for any work included in the project, hereinafter referred to as indemnitee, from all suits and claims, including attorney’s fees and cost of litigation, actions, loss, damage, expense, cost or claims of any character or any nature arising out of the work done in fulfillment of the terms of this Contract or on account of any act, claim or amount arising or recovered under workers’ compensation law or arising out of the failure of the contractor to conform to any statutes, ordinances, regulation, law or court decree. It is agreed that the Contractor will be responsible for primary loss investigation, defense and judgment costs where this contract of indemnity applies. In consideration of the award of this contract, the Contractor agrees to waive all rights of subrogation against the State of Idaho its subsidiary, parent, associated and/or affiliated entities, successors, or assigns, its elected officials, trustees, employees, agents, and volunteers for losses arising from the work performed by the Contractor for the State of Idaho.

§ A.3.3 Contractor’s Other Insurance Coverage

§ A.3.4 Performance Bond and Payment Bond

The Contractor shall provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located, as follows:

(Specify type and penal sum of bonds.)
<table>
<thead>
<tr>
<th>Type</th>
<th>Penal Sum ($0.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Bond</td>
<td>100% of Contract Value</td>
</tr>
<tr>
<td>Performance Bond</td>
<td>100% of Contract Value</td>
</tr>
</tbody>
</table>

Payment and Performance Bonds shall be AIA Document A312™, Payment Bond and Performance Bond, or contain provisions identical to AIA Document A312™, current as of the date of this Agreement.

**ARTICLE A.4 SPECIAL TERMS AND CONDITIONS**

Special terms and conditions that modify this Insurance and Bonds Exhibit, if any, are as follows:

| NA |
THIS PAGE INTENTIONALLY LEFT BLANK
General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

for the following PROJECT:
(Name, location or address)

ITD D1 Coeur d'Alene New Testing Laboratory
600 W. Prairie Ave.
Coeur d'Alene, ID 83814

THE CONSTRUCTION MANAGER:
(Name, legal status, and address)

Bateman-Hall, Inc.
1405 Foote Drive
Idaho Falls, ID 83402

THE OWNER:
(Name, legal status, and address)

State of Idaho Transportation Department
11331 W Chinden Blvd.
Boise, ID 83714

THE ARCHITECT:
(Name, legal status, and address)

Miller Stauffer Architects
601 E. Front Ave.
Coeur d'Alene, ID 83814

TABLE OF ARTICLES

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5 SUBCONTRACTORS

6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

7 CHANGES IN THE WORK

8 TIME

9 PAYMENTS AND COMPLETION

10 PROTECTION OF PERSONS AND PROPERTY

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.
11 INSURANCE AND BONDS

12 UNCOVERING AND CORRECTION OF WORK

13 MISCELLANEOUS PROVISIONS

14 TERMINATION OR SUSPENSION OF THE CONTRACT

15 CLAIMS AND DISPUTES
ARTICLE 1 GENERAL PROVISIONS
§ 1.1 Basic Definitions
§ 1.1.1 The Contract Documents. The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor’s bid or proposal, or portions of addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract. The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect’s consultants, (2) between the Owner and the Construction Manager or the Construction Manager’s consultants, (3) between the Owner and the Architect or the Architect’s consultants, (4) between the Contractor and the Construction Manager or the Construction Manager’s consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties.

§ 1.1.3 The Work. The term “Work” means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor’s obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Contractors, and by the Owner’s own forces and Separate Contractors.

§ 1.1.5 Contractors. Contractors are persons or entities, other than the Contractor or Separate Contractors, who perform Work under contracts with the Owner that are administered by the Architect and Construction Manager.

§ 1.1.6 Separate Contractors. Separate Contractors are persons or entities who perform construction under separate contracts with the Owner not administered by the Architect and Construction Manager.

§ 1.1.7 The Drawings. The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.8 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.9 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect’s consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.10 Initial Decision Maker. The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.
§ 1.2 Correlation and Intent of the Contract Documents
§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties’ intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization
Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation
In the interest of brevity the Contract Documents frequently omit modifying words such as “all” and “any” and articles such as “the” and “an,” but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service
§ 1.5.1 The Architect and the Architect’s consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect’s or Architect’s consultants’ reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect’s consultants.

§ 1.6 Notice
§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission
The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™-2013, Building
§ 1.8 Building Information Models Use and Reliance
Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™—2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™—2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party’s sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER
§ 2.1 General
§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner’s approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term “Owner” means the Owner or the Owner’s authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic’s lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner’s interest therein.

§ 2.2 Evidence of the Owner’s Financial Arrangements
§ 2.2.1 Prior to commencement of the Work, and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner’s obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner’s obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner’s ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor’s request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor’s reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as “confidential,” the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose “confidential” information, after seven (7) days’ notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose “confidential” information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.
§ 2.3 Information and Services Required of the Owner
§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 The Owner shall retain a construction manager adviser lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.4 If the employment of the Construction Manager or Architect terminates, the Owner shall employ a successor construction manager or architect to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

§ 2.3.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.6 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner’s control and relevant to the Contractor’s performance of the Work with reasonable promptness after receiving the Contractor’s written request for such information or services.

§ 2.3.7 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.3.8 The Owner shall forward all communications to the Contractor through the Construction Manager. Other communication shall be made as set forth in Section 4.2.6.

§ 2.4 Owner’s Right to Stop the Work
If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner’s Right to Carry Out the Work
If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to review by the Construction Manager and prior approval of the Architect, and the Construction Manager or Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner’s expenses and compensation for the Construction Manager’s and Architect’s and their respective consultants’ additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.
ARTICLE 3 CONTRACTOR
§ 3.1 General
§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term “Contractor” means the Contractor or the Contractor’s authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor
§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.5, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction Manager and Architect may require. It is recognized that the Contractor’s review is made in the Contractor’s capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor’s notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures
§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor’s best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, the Construction Manager, and the Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent.
for the completed construction. The Construction Manager shall review the proposed alternative for sequencing, constructability, and coordination impacts on the other Contractors. Unless the Architect or the Construction Manager objects to the Contractor’s proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor’s employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials
§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor’s employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty
§ 3.5.1 The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to those requirements may be considered defective. The Contractor’s warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes
The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices, and Compliance with Laws
§ 3.7.1 Unless otherwise provided in the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.
§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor’s cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor, stating the reasons. If the Owner or Contractor disputes the Architect’s determination or recommendation, either party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances
§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:
   .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
   .2 Contractor’s costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
   .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor’s costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent
§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect, through the Construction Manager, of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor, stating whether the Owner, the Construction Manager, or the Architect (1) has reasonable objection to the proposed superintendent or (2) require
additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager, or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner’s consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor’s Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner’s and Architect’s information, and the Construction Manager’s use in developing the Project schedule, a Contractor’s construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor’s Work to avoid conflict with, and as to cause no delay in, the work or activities of other Contractors, or the construction or operations of the Owner’s own forces or Separate Contractors.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Construction Manager’s and Architect’s approval. The Architect and Construction Manager’s approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor’s construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall participate with other Contractors, the Construction Manager, and the Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

§ 3.10.4 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager, and Architect, and incorporated into the approved Project schedule.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Construction Manager, Architect, and Owner, and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data, and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed.
in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.10 through 4.2.12. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the Project submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Contractors, Separate Contractors, or the Owner’s own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor’s Shop Drawings, Product Data, Samples, and similar submittals with related documents submitted by other Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been reviewed and approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect’s approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Construction Manager and Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect’s approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such notice, the Architect’s approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor’s responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional’s written approval when submitted to the Architect. The Owner, the Architect, and the Construction Manager shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with
information given and the design concept expressed in the Contract Documents. The Construction Manager shall review submittals for sequencing, constructability, and coordination impacts on other Contractors.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Construction Manager and Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site
§ 3.13.1 The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

§ 3.14 Cutting and Patching
§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner, Separate Contractors, or of other Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner, Separate Contractors, or by other Contractors except with written consent of the Construction Manager, Owner, and such other Contractors or Separate Contractors. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Separate Contractors, other Contractors, or the Owner, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up
§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work
The Contractor shall provide the Owner, Construction Manager, and Architect with access to the Work in progress and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights
The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager, and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or were the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Architect, or Construction Manager. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.

§ 3.18 Indemnification
§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Construction Manager's and Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is

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attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER
§ 4.1 General
§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 The Construction Manager is the person or entity retained by the Owner pursuant to Section 2.3.3 and identified as such in the Agreement.

§ 4.1.3 Duties, responsibilities, and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Construction Manager, Architect, and Contractor. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract
§ 4.2.1 The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner’s representatives during construction until the date the Architect issues the final Certificate for Payment. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner and the Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager known deviations from the Contract Documents and defects and deficiencies observed in the Work.

§ 4.2.3 The Construction Manager shall provide one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner and Architect reasonably informed of the progress of the Work, and will promptly report to the Owner and Architect known deviations from the Contract Documents and the most recent Project schedule, and defects and deficiencies observed in the Work.

§ 4.2.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Contractors in accordance with the latest approved Project schedule.

§ 4.2.5 The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor’s rights and responsibilities under the Contract Documents, and neither will be responsible for the Contractor’s failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of, or be responsible for acts or omissions of, the
Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

§ 4.2.6 Communications. The Owner shall communicate with the Contractor and the Construction Manager’s consultants through the Construction Manager about matters arising out of or relating to the Contract Documents. The Owner and Construction Manager shall include the Architect in all communications that relate to or affect the Architect’s services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Construction Manager otherwise relating to the Project. Communications by and with the Architect’s consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager. Communications by and with the Owner’s own forces and Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.7 The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

§ 4.2.8 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents, and will notify each other about the rejection. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, upon written authorization of the Owner, whether or not the Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect’s nor the Construction Manager’s authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons performing any of the Work.

§ 4.2.9 Utilizing the submittal schedule provided by the Contractor, the Construction Manager shall prepare, and revise as necessary, a Project submittal schedule incorporating information from other Contractors, the Owner, Owner’s consultants, Owner’s Separate Contractors and vendors, governmental agencies, and participants in the Project under the management of the Construction Manager. The Project submittal schedule and any revisions shall be submitted to the Architect for approval.

§ 4.2.10 The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data, and Samples. Where there are other Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from the Contractor and other Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager’s actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

§ 4.2.11 The Architect will review and approve, or take other appropriate action upon, the Contractor’s submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect’s action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect’s professional judgment to permit adequate review. Upon the Architect’s completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.12 Review of the Contractor’s submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect’s review of the Contractor’s submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Construction Manager and Architect’s review shall not constitute approval of safety precautions or of any
construction means, methods, techniques, sequences, or procedures. The Architect’s approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.13 The Construction Manager will prepare Change Orders and Construction Change Directives.

§ 4.2.14 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7, and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.15 Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples, and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

§ 4.2.16 The Construction Manager will assist the Architect in conducting inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor’s compliance with the requirements of the Contract Documents.

§ 4.2.17 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect’s responsibilities at the site. The Owner shall notify the Construction Manager of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.18 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of the Construction Manager, Owner, or Contractor through the Construction Manager. The Architect’s response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.19 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions so rendered in good faith.

§ 4.2.20 The Architect’s decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.21 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager’s recommendation. The Architect will review and respond in writing, through the Construction Manager, to requests for information about the Contract Documents. The Construction Manager’s recommendation and the Architect’s response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5  SUBCONTRACTORS
§ 5.1 Definitions
§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term “Subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term “Subcontractor” does not include other Contractors or Separate Contractors or the subcontractors of other Contractors or Separate Contractors.
§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term “Sub-subcontractor” is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work
§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Construction Manager, for review by the Owner, Construction Manager and Architect, of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor whether the Owner, the Construction Manager or the Architect (1) has reasonable objection to any such proposed person or entity or, (2) requires additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor’s Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsibly in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations
By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor’s Work, that the Contractor, by these Contract Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts
§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

.1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and

.2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.
When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor’s rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor’s compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor’s obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
§ 6.1 Owner’s Right to Perform Construction with Own Forces and to Award Other Contracts
§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner’s own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When the Owner performs construction or operations with the Owner’s own forces or Separate Contractors, the Owner shall provide for coordination of such forces and Separate Contractors with the Work of the Contractor, who shall cooperate with them.

§ 6.1.3 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner’s own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility
§ 6.2.1 The Contractor shall afford the Owner’s own forces, Separate Contractors, Construction Manager and other Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor’s construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor’s Work depends for proper execution or results upon construction or operations by the Owner’s own forces, Separate Contractors or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor or other Contractors that would render it unsuitable for proper execution and results of the Contractor’s Work. Failure of the Contractor to notify the Construction Manager and the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner’s or Separate Contractor’s or other Contractors’ completed or partially completed construction is fit and proper to receive the Contractor’s Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractors or other Contractors that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a Separate Contractors or to other Contractors, because of the Contractor’s delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work or defective construction by the Owner’s own forces, Separate Contractors, or other Contractors.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction, or to property of the Owner, Separate Contractors, or other Contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner, Separate Contractors, and other Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.
§ 6.3 Owner’s Right to Clean Up
If a dispute arises among the Contractor, Separate Contractors, other Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK
§ 7.1 General
§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders
A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect, and Contractor, stating their agreement upon all of the following:
.1 The change in the Work;
.2 The amount of the adjustment, if any, in the Contract Sum; and
.3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives
§ 7.3.1 A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
.1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
.2 Unit prices stated in the Contract Documents or subsequently agreed upon;
.3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
.4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:
.1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Construction Manager and Architect;

.2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;

.3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;

.4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and

.5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work
The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Construction Manager that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME
§ 8.1 Definitions
§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.
§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion
§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time
§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner, Architect, Construction Manager, or an employee of any of them, or of the Owner's own forces, Separate Contractors, or other Contractors; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts and the Architect, based on the recommendation of the Construction Manager, determines justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION
§ 9.1 Contract Sum
§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values
Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Construction Manager, before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Construction Manager and the Architect. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The Construction Manager shall forward to the Architect the Contractor's schedule of values. Any changes to the schedule of values shall be submitted to the Construction Manager and supported by such data to substantiate its accuracy as the Construction Manager and the Architect may require, and unless objected to by the Construction Manager or the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment
§ 9.3.1 At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner, Construction Manager or
Architect require, such as copies of requisitions, and releases of waivers of lien from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner’s title to such materials and equipment or otherwise protect the Owner’s interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor’s knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager’s receipt of the Contractor’s Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor’s Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor’s Application for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Certificate for Payment, in the full amount of the Application for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect’s reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Construction Manager and Owner of the Architect’s reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect’s notice of withholding certification.

§ 9.4.2 Where there is more than one Contractor performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives all of the Contractors’ Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Contractors; (2) prepare a Summary of Contractors’ Applications for Payment by combining information from each Contractor’s application with information from similar applications for progress payments from the other Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Contractors; and (5) forward the Summary of Contractors’ Applications for Payment and Project Application and Certificate for Payment to the Architect.

§ 9.4.2.1 Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors’ Applications for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Project Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect’s reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Project Application for Payment, and notify the Construction Manager and Owner of the Architect’s reason for withholding certification in whole as provided in
Section 9.5.1. The Construction Manager will promptly forward the Architect’s notice of withholding certification to the Contractors.

§ 9.4.3 The Construction Manager’s certification of an Application for Payment or, in the case of more than one Contractor, a Project Application and Certificate for Payment, shall be based upon the Construction Manager’s evaluation of the Work and the data in the Application or Applications for Payment. The Construction Manager’s certification will constitute a representation that, to the best of the Construction Manager’s knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment: in the amount certified.

§ 9.4.4 The Architect’s issuance of a Certificate for Payment or, in the case of more than one Contractor, Project Application and Certificate for Payment, shall be based upon the Architect’s evaluation of the Work, the recommendation of the Construction Manager, and data in the Application for Payment or Project Application for Payment. The Architect’s certification will constitute a representation that, to the best of the Architect’s knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

§ 9.4.5 The representations made pursuant to Sections 9.4.3 and 9.4.4 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Construction Manager or Architect.

§ 9.4.6 The issuance of a Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor’s right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager’s or Architect’s opinion the representations to the Owner required by Section 9.4.3 and 9.4.4 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.2. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager’s or Architect’s opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

1. defective work not remedied;
2. third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
3. failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
4. reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
5. damage to the Owner or a Separate Contractor or other Contractor;
6. reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
7. repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect’s decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.
§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager, and both will reflect such payment on the next Certificate for Payment.

§ 9.6 Progress Payments
§ 9.6.1 After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor’s portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor’s payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney’s fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment
If the Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor, within fourteen days after the Construction Manager’s receipt of the Contractor’s Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Construction Manager and Architect or awarded
by binding dispute resolution, then the Contractor may, upon seven additional days’ notice to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor’s reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion
§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the list, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect’s inspection discloses any item, whether or not included on the list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

§ 9.8.4 When the Architect, assisted by the Construction Manager, determines that the Work of all of the Contractors, or designated portion thereof, is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute, a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use
§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.
§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a notice that the Work is ready for final inspection and acceptance, and shall also forward to the Construction Manager a final Contractor’s Application for Payment. Upon receipt, the Construction Manager shall perform an inspection to confirm the completion of Work of the Contractor. The Construction Manager shall make recommendations to the Architect when the Work of all of the Contractors is ready for final inspection, and shall then forward the Contractors’ notices and Application for Payment or Project Application for Payment, to the Architect, who will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager’s and Architect’s final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor’s being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner’s property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment (5) documentation of any special warranties, such as manufacturers’ warranties or specific Subcontractor warranties, and (6), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys’ fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainerage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

1. liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
2. failure of the Work to comply with the requirements of the Contract Documents;
3. terms of special warranties required by the Contract Documents; or
4. audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.
ARTICLE 10  PROTECTION OF PERSONS AND PROPERTY
§ 10.1 Safety Precautions and Programs
The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor’s safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager’s responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work not directly employed by the Construction Manager.

§ 10.2 Safety of Persons and Property
§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to
   .1 employees on the Work and other persons who may be affected thereby;
   .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor;
   .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and
   .4 construction or operations by the Owner, Separate Contractors, or other Contractors.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor’s obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor’s organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor’s superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property
If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.
§ 10.3 Hazardous Materials

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner, Construction Manager and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor’s notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor’s reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys’ fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor’s fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner’s fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies
In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor’s discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11  INSURANCE AND BONDS
§ 11.1 Contractor’s Insurance and Bonds
§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or

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insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Construction Manager and Construction Manager’s consultants, and the Architect and Architect’s consultants, shall be named as additional insureds under the Contractor’s commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor’s Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice directly to the Owner, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner’s Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform both the Contractor and the Construction Manager, separately and in writing, prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 Notice of Cancellation or Expiration of Owner’s Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice directly to the Contractor, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.
§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Construction Manager and Construction Manager’s consultants; (3) the Architect and Architect’s consultants; (4) other Contractors and any of their subcontractors, sub-subcontractors, agents, and employees; and (5) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceed of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Construction Manager, Construction Manager’s consultants, Architect, Architect’s consultants, other Contractors, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner’s option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner’s property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor, Architect, and Construction Manager for loss of use of the Owner’s property, due to fire or other hazards however caused.

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Construction Manager, Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Construction Manager, Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager’s or Architect’s request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their examination and be replaced at the Contractor’s expense without change in the Contract Time.
§ 12.1.2 If a portion of the Work has been covered that the Construction Manager or Architect has not specifically requested to examine prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor’s expense.

§ 12.2 Correction of Work
§ 12.2.1 Before Substantial Completion
The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion, and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager’s and Architect’s services and expenses made necessary thereby, shall be at the Contractor’s expense.

§ 12.2.2 After Substantial Completion
§ 12.2.2.1 In addition to the Contractor’s obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, Construction Manager or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner, Separate Contractors, or other Contractors, whether completed or partially completed, caused by the Contractor’s correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor’s liability with respect to the Contractor’s obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work
If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.
ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law
The Contract shall be governed by the law of the place where the Project is located excluding that jurisdiction’s choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns
§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner’s rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies
§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections
§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Construction Manager, Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner’s expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Construction Manager’s and Architect’s services and expenses, shall be at the Contractor’s expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.
§ 13.4.5 If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest
Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT
§ 14.1 Termination by the Contractor
§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:
- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days’ notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees, or any other persons performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner’s obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days’ notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause
§ 14.2.1 The Owner may terminate the Contract if the Contractor
- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, after consultation with the Construction Manager, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without
prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor’s surety, if any, seven days’ notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

1. Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

2. Accept assignment of subcontracts pursuant to Section 5.4; and

3. Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager’s and Architect’s services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience
§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

1. that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or

2. that an equitable adjustment is made or denied under another provision of this Contract.

§ 14.4 Termination by the Owner for Convenience
§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner’s convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner’s convenience, the Contractor shall

1. cease operations as directed by the Owner in the notice;

2. take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and

3. except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner’s convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES
§ 15.1 Claims
§ 15.1.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term “Claim” also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.
§ 15.1.2 Time Limits on Claims
The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims
§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance
§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker’s decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time
§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor’s Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

.1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

.2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party’s termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

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User Notes:
§ 15.2 Initial Decision
§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker’s sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner’s expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties, the Construction Manager, and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days of receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor’s default, the Owner may, but is not obligated to, notify the surety and request the surety’s assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic’s lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation
§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.
§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator’s fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.2 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.3 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.4 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.
§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.
Additions and Deletions Report for
AIA® Document A232® – 2019

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 15:20:58 MT on 02/27/2024.

PAGE 1

ITD D1 Coeur d'Alene New Testing Laboratory
600 W. Prairie Ave.
Coeur d'Alene, ID 83814

...

Bateman-Hall, Inc.
1405 Foote Drive
Idaho Falls, ID 83402

...

State of Idaho Transportation Department
11331 W Chinden Blvd.
Boise, ID 83714

...

Miller Stauffer Architects
601 E. Front Ave.
Coeur d'Alene, ID 83814
Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, Vanessa Josephson, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 15:20:58 MT on 02/27/2024 under Order No. 2114431607 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A232™ - 2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

Vanessa Josephson

(Title)

Project Manager

(Dated)

2-27-24
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CONTRACTOR’S AFFIDAVIT CONCERNING TAXES

STATE OF ____________________________ )
COUNTY OF ____________________________ )

Pursuant to the Idaho Code Title 63, Chapter 15, I the undersigned, being duly sworn, depose and certify that all taxes, excises, and license fees due to the State or its taxing units, for which I or my property is liable then due or delinquent, has been paid, or arrangements have been made, before entering into a contract for construction of any public works in the State of Idaho.

{Contractor's Company Name} - {FMXXXXX}
Name of Contractor

{Mailing Address}
Address

{Mailing City, State Zip}
City and State

SEAL

By: ________________________________
(Signature)

Subscribed and sworn to before me this ____________ day of __________________ 20____.

_____________________________________
NOTARY PUBLIC
Residing at: ______________________________
Commission Expires: __________________________

Rev 0 – 2-27-2024 00816-1 CONTRACTOR’S AFFIDAIT CONCERNING TAXES
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Idaho State Tax Commission
CONTRACTOR’S REQUEST FOR TAX RELEASE

Date: __________________________

**PART I -- AWARDING AGENCY INFORMATION:**

<table>
<thead>
<tr>
<th>Name of agency</th>
<th>Mailing address</th>
<th>City, State, &amp; Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idaho Transportation Department</td>
<td>11331 W Chinden Blvd</td>
<td>Boise, ID 83714</td>
</tr>
</tbody>
</table>

Contact name: Travis Frei, Contracting Officer
Phone number: 208-334-8622
Email address: Travis.Frei@itd.idaho.gov

**PART II -- CONTRACTOR INFORMATION:**

<table>
<thead>
<tr>
<th>Name of contractor</th>
<th>Mailing address</th>
<th>City, State, &amp; Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>{Contractor's Company Name}</td>
<td>{Mailing Address}</td>
<td>{Mailing City, State Zip}</td>
</tr>
</tbody>
</table>

Federal EIN: 82-0328277
Contact name: Patti Cole, Compliance Officer
Phone number: 208-523-2681
Email address: Patti.Cole@bateman-hall.com

Send a copy of the Approved Tax Release to: ☒ Awarding Agency  ☒ Contractor  ☒ Construction Manager

**NOTE:** We will email all copies unless otherwise requested

**PART III -- CONSTRUCTION/CONTRACT MANAGER INFORMATION (if applicable):**

<table>
<thead>
<tr>
<th>Name of business</th>
<th>Mailing address</th>
<th>City, State, &amp; Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bateman-Hall, Inc.</td>
<td>PO Box 1464</td>
<td>Idaho Falls, ID 83402</td>
</tr>
</tbody>
</table>

Federal EIN: 82-0328277
Contact name: Patti Cole, Compliance Officer
Phone number: 208-523-2681
Email address: Patti.Cole@bateman-hall.com

**PART IV – PROJECT INFORMATION**

<table>
<thead>
<tr>
<th>Name of project</th>
<th>Location of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITD D1 Coeur d'Alene New Testing Laboratory</td>
<td>600 W. Prairie Ave., Coeur d'Alene, ID 83814</td>
</tr>
</tbody>
</table>

Description of Project

<table>
<thead>
<tr>
<th>Project number assigned by awarding agency</th>
<th>Project start date</th>
<th>Project completion date</th>
<th>Final/closing contract amount (includes all change orders)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D231130</td>
<td></td>
<td></td>
<td>$$XX,XXX.XX</td>
</tr>
</tbody>
</table>
Did any government entities supply materials which were installed by this contractor or its subs?  

☐ Yes  ☐ No

If YES, list these materials and their dollar values. (Attach additional information if needed)

<table>
<thead>
<tr>
<th>List Materials</th>
<th>List Dollar Values of Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>$</td>
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<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Send to: Contract Desk/Sales Tax Audit  
Idaho State Tax Commission  
PO Box 36  
Boise, ID 83722-0410

Phone: (208) 334-7618  
Fax: (208) 332-6619  
Email: contractdesk@tax.idaho.gov
RELEASE OF CLAIMS

(TO BE COMPLETED FOR FINAL PAYMENT)

I, ___________________________________________ do hereby release the State of Idaho from any and all claims of any character whatsoever arising under and by virtue of contract number {FMXXXXX} dated {Month} {Day}, 2024 as amended, except as herein stated.

{Contractor's Company Name} - {FMXXXXX}

Name of Contractor

By: __________________________________________

(Signature)

Date _________________________________________
CONDITiONS PRECEDENT TO FINAL PAYMENT

Contractor:  {Contractor's Company Name} - {FMXXXXX}
ITD Project No.  D231130
Project Title:  ITD D1 Coeur d'Alene New Testing Laboratory
Location:  600 W. Prairie Ave. Coeur d'Alene, ID 83814

Send to:  
State of Idaho  
Idaho Transportation Department  
11331 W Chinden Blvd  
Boise, ID 83714

Copy to:  
Bateman-Hall, Inc.  
Attn:  Patti Cole  
PO Box 1464  
Idaho Falls, ID 83403

Bateman-Hall, Inc.  
Attn:  Patti Cole  
1405 Foote Dr.  
Idaho Falls, ID 83402

Contractor’s Responsibilities:

As a condition precedent to final payment, the Contractor must furnish the owner, in the form and manner required by Owner, to be submitted to the Construction Manager for approval, the following:

☐ Contractor’s Final Request for Payment Form has been provided;
☐ Release of Claims form has been provided;
☐ Contractor’s Affidavit of Payment of Debts and Claims Form has been provided (AIA G706);
☐ Consent of Surety to Final Payment has been provided (AIA G707);
☐ Confirmation of all required training (DPW’s Training Confirmation Form), product warranties, operating manuals, instruction manuals, and other record documents, drawings and items customarily required of the Contractor has been provided.
☐ Public Works Contract Tax Release from the Idaho Tax Commission has been provided;
☐ NA  ITD’s Letter of Completion/Final Inspection Sign-Off (as required);
☐ Project Finalization and Start Up has been provided (as required)

Contractor’s Signature  Date

Construction Manager’s Approval for Payment:

☐ All Warranties, Guarantees, etc. have been received, approved, and have been provided.
☐ Contractor’s As-Built Drawings have been received, reviewed, approved.
☐ Final punch list with AE’s verification that all items have been completed.
☐ Record Drawings have been completed by AE. All required copies of the Record Documents and electronic media area attached and signed off as complete.

To the best of my knowledge, information, and belief, and on the basis of my observations and inspections, I certify the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the required documentation required by Paragraph 7.13 of the fixed priced contract has been received. The entire balance, as shown on the attached Final Request for Payment, is due and payable.

Construction Manager’s Signature  Date
Contractor's Affidavit of Payment of Debts and Claims

PROJECT: ITD D1 Coeur d'Alene New Testing Laboratory
600 W. Prairie Ave.
Coeur d'Alene, ID

ARCHITECT'S PROJECT NUMBER: [Arch's Project #]

ARCHITECT: [Signature]

OWNER: [Signature]

CONTRACT FOR: [Short Description]

CONTRACTOR: [Signature]

SURETY: [Signature]

OTHER: [Signature]

TO OWNER:
Idaho Transportation Department
11331 W Chinden Blvd
Boise, ID 83714

STATE OF: ______________________
COUNTY OF: ____________________

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services, performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner’s property might in any way be held responsible or encumbered.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707™, Consent of Surety to Final Payment, may be used for this purpose.

Indicate Attachment: □ Yes □ No

The following supporting documents should be attached hereto if required by the Owner:

1. Contractor’s Release or Waiver of Liens, conditional upon receipt of final payment

2. Separate Releases of Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof

3. Contractor’s Affidavit of Release of Liens (AIA Document G706A™)

CONTRACTOR:

[Contractor's Company Name]
[Physical Address]
[Physical City, State Zip]

BY:

(Signature of authorized representative)

(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:
Contractor’s Affidavit of Release of Liens

PROJECT:  ITD D1 Coeur d’Alene New Testing Laboratory
           600 W. Prairie Ave.
           Coeur d’Alene, ID

ARCHITECT’S PROJECT NUMBER:  {Arch’s Project #}

TO OWNER:  Idaho Transportation Department
           11331 W Chinden Blvd
           Boise, ID 83714

OWNER:  

ARCHITECT:  

CONTRACT FOR:  {Short Description}

CONTRACT DATED:  {Month} {Day}, 2024

CONTRACTOR:  

SURETY:  

OTHER:  

STATE OF:  ______________________

COUNTY OF:  ______________________

The undersigned hereby certifies that to the best of the undersigned’s knowledge, information and belief, except a listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of the Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:
1. Contractor’s Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR:  

{Contractor’s Company Name}

{Physical Address}

{Physical City, State Zip}

BY:

(Signature of authorized representative)

(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:
Certificate of Substantial Completion, Construction Manager as Adviser Edition  

PROJECT:  
D231130 - ITD D1 Coeur d'Alene New Testing Laboratory  
600 W. Prairie Ave.  
Coeur d'Alene, ID  

CONTRACT INFORMATION:  
Contract For: [Short Description]  
Date: {Month} {Day}, 2024  

CERTIFICATE INFORMATION:  
Certificate Number: {FMXXXXX}  
Date: March 11, 2024  

OWNER:  
Idaho Transportation Department  
11331 W Chinden Blvd  
Boise, ID 83714  

ARCHITECT:  
Miller Staufer Architects  
601 E. Front Ave. Ste. 201  
Coeur d'Alene, ID 83814  

CONSTRUCTION MANAGER:  
Bateman-Hall, Inc.  
1405 Foote Drive  
Idaho Falls, ID 83402  

CONTRACTOR(S):  
{Contractor's Company Name} ({FMXXXXX})  
{Mailing Address}  
{Mailing City, State Zip}  

The Work identified below has been reviewed and found, to the Construction Manager’s and Architect’s best knowledge, information and belief, to be substantially complete. Substantial Completion is the state in the progress of the Work when the Work of all the Contractors or designated portion thereof, is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project, or portion thereof designated below, is also the date of commencement of warranties required by the Contract Documents, except as stated below: (Identify warranties that do not commence on the date of Substantial Completion, if any, and indicate their date of commencement.)  

WARRANTIES  

WARRANTIES  

WORK TO BE COMPLETED OR CORRECTED  
A list of items to be completed or corrected by each of the Contractors, including a cost estimate, is attached hereto or transmitted as agreed upon by the parties, and identified as follows:  

LIST OF ITEMS NEEDING COMPLETED OR CORRECTED - G734-2019
The failure to include any items on such list does not alter the responsibility of a Contractor to complete all Work in accordance with the Contract Documents. Unless otherwise agreed to in writing, the date of commencement of warranties for items on the attached lists will be the date of issuance of the final Certificate of Payment or the date of final payment, whichever occurs first. Each Contractor will complete or correct the Work on the appropriate list of items attached hereto within sixty (30) days from the above date of Substantial Completion.

As of the date of Substantial Completion, the Owner shall be responsible for security, maintenance, heat, utilities, damage to the Work, and insurance, except as noted below:

{Contractor's Remaining Responsibilities - G734-2019}

[Contractor's Company Name]
CONTRACTOR
SIGNATURE
PRINTED NAME AND TITLE
DATE

Idaho Transportation Department
OWNER
SIGNATURE
PRINTED NAME AND TITLE
DATE

Idaho Transportation Department
OWNER
SIGNATURE
PRINTED NAME AND TITLE
DATE
SECTION 011100 – SUMMARY OF WORK

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A PROJECT SCOPE
B PHASES OF PROJECT
C CONTRACT RELATIONSHIP
D LOCATION
E OWNER SUPPLIED PRODUCTS
F CONTRACTOR USE OF SITE
G EXISTING SERVICES, STRUCTURES, AND UNDERGROUND FACILITIES
H PROTECTION OF WORK AND IMPROVEMENTS
I SCHEDULES AND WORK SEQUENCE
J OWNER OCCUPANCY

Section 1.02 PROJECT SCOPE

A The project is to build a new Asphalt and Concrete Testing Laboratory on the District #1 Campus. The proposed facility is a single-story facility that is separated into four primary sections: office space, D-1 lab area, a residency lab area, and storage area. The facility is to be constructed out of Concrete Masonry Construction and Light wood frame construction. The facility has concrete slab-on-grade floors and low sloped roofs. The roofs are single ply roofing and metal roofing.

B Due to the nature of the facility, there is a high amount of mechanical and electrical work needed for the project. Significant coordination is needed to facilitate these constructions. It shall be the responsibility of the contractors to coordinate their work with other contractors that will interface with their work.

Section 1.03 PHASES OF PROJECT

A There will be two phases of this project as defined by the construction manager as advisor.

(i) Phase I – Site Utilities, Site Clearing, Excavation
(ii) Phase II – Building Construction & Finalization of Site Improvements

Section 1.04 CONTRACT RELATIONSHIP

A This project will be delivered through multiple prime contracts with the owner. The owner has procured the services of a construction manager as advisor for the duration of the project. The construction manager will provide coordination services during the project. The construction manager will bid on the various contract scopes on behalf of the owner. All communications must go through the construction manager.

B The CMa will coordinate the activities of the multiple contractors.
C The CMa will provide contract administration services in conjunction with the Architect.

D The CMa will not be responsible for the physical construction of the project and will only provide administrative services to provide a concise, well-delivered project to the owner. Providing expertise in planning, managing, and coordinating the project from start to finish.

E Owner contracted contractors and sub-contractors are responsible for construction.

(i)

Section 1.05 LOCATION

A 600 W. Prairie Ave. Coeur d’Alene, Idaho 83815 – Project Site is located West of the Main Administrative building.

Section 1.06 OWNER SUPPLIED PRODUCTS

A Lab Equipment – Refer to Equipment Plan

B Furniture

(i) Cubicles

(ii) Office Chairs

(iii) Kitchen Appliances

(iv) Computers and Printers

Section 1.07 CONTRACTORS USE OF SITE

A The contractors shall have limited use of the site during construction. The construction site will be designated by construction fencing and secured.

Section 1.08 EXISTING SERVICES, STRUCTURES, AND UNDERGROUND FACILITIES

A EXISTING SERVICES

(i) The Site has several utilities already on the site. It shall be the responsibility of the contractors to locate and analyze the existing construction and construction by other contractors to complete their scope of work. The contractors will be responsible for coordinating with the construction advisor and other prime contractors to complete their scope of work.

B STRUCTURES

(i) There are several facilities and improved asphalt parking lot areas. Contractors are to take care to protect the existing improvements and constructions.

C UNDERGROUND FACILITIES

(i) There are several existing underground facilities around the project site. Care is to be taken to not damage construction that is intended to stay. Damage to the existing construction that is not intended to be removed will be the responsibility of the contractor to repair or replace.

(ii) The contractor is responsible for calling for all underground facility locations.
(iii) An Alta Survey has been performed on the site. This information will be provided to the contractor. It shall be the responsibility of the contractors to review this information if it will impact their work.

Section 1.09 PROTECTION OF WORK AND IMPROVEMENTS

A All Contractors shall be responsible for the protection of their work. If a contractor damages another contractor’s work, they shall be responsible for the cost of repairing or replacing the damaged work.

B Every Contractor shall be responsible for informing the Construction Manager as Advisor if a portion of work has been damaged.

Section 1.10 SCHEDULES AND WORK SEQUENCE

A The construction advisor will provide an overall construction schedule to give the multiple prime contractors the information and timeframe necessary to complete their work. The work sequence will be coordinated by the Construction Advisor.

B Every prime contractor is required to provide a detailed schedule denoting their scope of work. They will be required to provide a 3-week look ahead for their scope of work that is to be submitted bimonthly.

Section 1.11 OWNER OCCUPANCY

A Owner shall have access to site throughout the term of the project. A designated area around the future structure and site improvements will be fenced off to limit access to the job site from the owner and users. The owner will coordinate access of owner vendors and personnel with the Construction Advisor.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 011100
SECTION 011116 – WORK BY OWNER

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A OWNER FURNISHED EQUIPMENT
B OWNER INSTALLED EQUIPMENT

Section 1.02 OWNER FURNISHED EQUIPMENT

A There is no owner furnished equipment for this project. All equipment and materials are to be supplied by the contractor.

Section 1.03 OWNER INSTALLED EQUIPMENT

(i) The owner does not supply any equipment noted in the scope of work. All equipment is to be supplied by the contractor and installed by the contractor.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 011116
SECTION 011400 – WORK RESTRICTIONS

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A USE OF SITE

B COORDINATION WITH OCCUPANTS

C WORK RESTRICTIONS

D STORAGE

Section 1.02 USE OF SITE

A General: Contractors shall have limited use of the site for construction operations during the entire construction period.

(i) The site area will be secured with temporary fencing.

B Use of the Site: Contractor will be required to work within designated areas. If work needs to occur outside the designated owner. The contractor will be required to notify the construction manager if the site fencing needs to be modified.

(i) Driveways, Walkways and Entrances: Keep driveways, walkways, loading areas and entrances serving the site clear and available to Idaho Transportation Department. The Construction entrances are not to be blocked unless prior approval has been given. Notify Construction Manager if entrances are going to be blocked. Store all materials in the designated areas.

(ii) Limits: Confine construction operations to the areas that have been approved by the owner and construction manager.

(iii) Owner Use of Site: The owner will continue operations outside of the construction enclosure. The contractors are to not impede the owners’ operations unless prior coordination has been completed. The Owner will not access the construction site unless prior approved by the construction manager. The Construction Manager will make contractors aware of site visits.

(iv) Routes of ingress and egress to areas where work is being performed shall be subject to restrictions and instructions of the Owner.

a) Schedule deliveries to minimize use of driveways and entrances by construction operations.

b) Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C Existing Buildings

(i) None of the Existing Buildings will be accessible to contractors unless prior approval has been given. If access to an existing building is needed to complete the contractor’s work, notify the construction manager.

(ii) Protect all buildings and occupants during the construction period.
Section 1.03 COORDINATION WITH OCCUPANTS

A Full Site Occupancy: Idaho Transportation Department will occupy the site around the construction site, including existing buildings during the entire construction period. Cooperate with Construction Manager and Owner during construction operations to minimize conflicts and facilitate both the contractors and the owner’s usage. Perform the work so as not to interfere with Idaho Transportation Department Day to day operations. If after normal hour construction operations are required to complete the contractors work, notify the construction manager and owner to minimize disturbance. After-hours work to be done at NO Cost to the Owner.

B Notify the Construction Manager and the Owner not less than 72 hours in advance of activities that will affect the Idaho Transportation Department’s operations.

Section 1.04 WORK RESTRICTIONS

A On-Site Work Hours, General: Work shall be generally performed during normal working hours and days.
   (i) Workdays: Monday through Friday
   (ii) Work Hours: 7:00am to 5:00pm Local Time
   a) Weekend Hours: Coordinate with Construction Manager, Owner and Authorities having jurisdiction.
   b) Early Morning Hours: Coordinate with Construction Manager, Owner and Authorities having jurisdiction.
   c) Hours for Utility Shutdowns: Coordinate with Construction Manager, Owner and Authorities having jurisdiction.
   d) Comply with all requirements and restrictions for use in public right of ways. Provide traffic control plans and traffic control to complete the contractors scope of work in the public right of way. Coordinate all work with construction manager, owner, and authorities having jurisdiction.

B Existing Utility Interruptions: Do not interrupt utilities serving existing facilities occupied by owner or others unless permitted by the construction manager, owner and authorities having jurisdiction. Contractor must receive written approval.

C Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise, vibration, odors, or disruptions to the owner occupancy with the construction manager and owner.

D The site is a drug free zone. Drug use of any kind will not be permitted. Zero Tolerance will be used if use is found.

E The site is Non-Smoking. Smoking is prohibited.

Section 1.05 STORAGE

A In the event that, it is necessary for the Contractor to stockpile or store quantities of material or equipment on the job site, the contractor shall inform the construction manager and owner of such necessity. The construction manager shall offer available space. The Contractor shall use said space only for such purpose. Any and all materials which may be brough onto the job site at any time by the Contractor shall be left at the Contractor’s sole risk. The Owner shall not be responsible to the Contractor for loss of or damage to said materials or equipment for any cause whatsoever. It is expressly understood and agreed that the Contractor assumes all risk of loss or damage to such materials and equipment. The owner will not provide a watchman. The contractor shall take necessary measures to protect any such storage area and shall be responsible for any and all damages.

B The Contractor shall confine storage of materials to limits approved by the Construction Manager and by the Owner. The Contractor shall not necessarily encumber the premises or overload any portion of it with materials to
a greater extent than is calculated to bear. The Contractor shall not store hazardous materials, such as solvents, paints, thinners, etc. unless in approved containers and quantities.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 011400
SECTION 012000 – Allowances, Unit Prices, & Alternates

Part 1. GENERAL

Section 1.01 SECTION INCLUDES
   A ALLOWANCES
   B UNIT PRICES
   C ALTERNATES

Section 1.02 ALLOWANCES
   A There are no allowances on this project. Not applicable.

Section 1.03 UNIT PRICES
   A There are no allowances on this project. Not applicable.

Section 1.04 ALTERNATES
   A There are no alternative scopes of work on this project. Not applicable.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 012000
SECTION 012500 – POST BID SUBSTITUTION PROCEDURES

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A DEFINITIONS
B ACTION SUBMITTALS
C QUALITY ASSURANCE
D PROCEDURES
E SUBSTITUTIONS

Section 1.02 DEFINITIONS

A Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

(i) Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.

(ii) Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

Section 1.03 ACTION SUBMITTALS

A Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

(i) Substitution Request Form: Use form provided in Section 012501.

(ii) Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a) Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.

b) Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

c) Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

d) Product Data, including drawings and descriptions of products and fabrication and installation procedures.

e) Samples, where applicable or requested.

f) Certificates and qualification data, where applicable or requested.
g) List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.

h) Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.

i) Research reports evidencing compliance with building code in effect for Project, from ICC-ES.

j) Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.

k) Cost information, including a proposal of change, if any, in the Contract Sum.

l) Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.

m) Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

(iii) Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 3 Business days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 5 Business days of receipt of request, or 3 Business days of receipt of additional information or documentation, whichever is later.

a) Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.

b) Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

Section 1.04 QUALITY ASSURANCE

A Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

Section 1.05 PROCEDURES

A Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

Section 1.06 SUBSTITUTIONS

A Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 7 Business days prior to time required for preparation and review of related submittals.

(i) Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

a) Requested substitution is consistent with the Contract Documents and will produce indicated results.

b) Substitution request is fully documented and properly submitted.
c) Requested substitution will not adversely affect Contractor's construction schedule.

d) Requested substitution has received necessary approvals of authorities having jurisdiction.

e) Requested substitution is compatible with other portions of the Work.

f) Requested substitution has been coordinated with other portions of the Work.

g) Requested substitution provides specified warranty.

h) If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

(ii) Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.

(iii) Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

a) Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.

b) Requested substitution does not require extensive revisions to the Contract Documents.

c) Requested substitution is consistent with the Contract Documents and will produce indicated results.

d) Substitution request is fully documented and properly submitted.

e) Requested substitution will not adversely affect Contractor's construction schedule.

f) Requested substitution has received necessary approvals of authorities having jurisdiction.

g) Requested substitution is compatible with other portions of the Work.

h) Requested substitution has been coordinated with other portions of the Work.

i) Requested substitution provides specified warranty.

j) If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE
END OF SECTION 012500
SECTION 012501 – POST BID SUBSTITUTION FORM

Part 1. GENERAL

TO:___________________________________________________________

PROJECT:_____________________________________________________

SPECIFIED ITEM:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Paragraph</th>
<th>Description</th>
</tr>
</thead>
</table>

The undersigned requests consideration of the following.

PROPOSED SUBSTITUTION:__________________________________________

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

1. The proposed substitution does not affect dimensions shown on the drawings.

2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.

3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.

4. Maintenance and service parts are locally available for the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the Specified item.

Submitted by:

Signature_________________________________________ For use by Architect:

Firm_________________________________________ Accepted

Address_______________________________________ Accepted as Noted

Date_________________________________________ Not Accepted

Telephone_____________________________________

Fax___________________________________________ Received Too Late

Remarks_______________________________________

Attachments:
Part 2. PRODUCTS
Section 2.01 NOT APPLICABLE

Part 3. EXECUTION
Section 3.01 NOT APPLICABLE

END OF SECTION 012501
SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A DEFINITIONS
B INFORMATIONAL SUBMITTALS
C GENERAL COORDINATION PROCEDURES
D COORDINATION DRAWINGS
E REQUEST FOR INFORMATION (RFI's)
F PROJECT MEETINGS

Section 1.02 DEFINITIONS

A RFI: Request For Information from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

Section 1.03 INFORMATIONAL SUBMITTALS

A Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:

(i) Name, Address, and Telephone number of entity performing subcontract or supplying products.

(ii) Number and title of specification section covered by subcontract.

(iii) Drawing number and detail references, as appropriate, covered by subcontract.

B Key Personnel Names: Within 5 days of starting construction operations, submit a list of key personnel assignments, including foreman and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities. Keep Construction Manager updated of all changes.

Section 1.04 GENERAL COORDINATION PROCEDURES

A Coordination: coordinate construction operations included in different sections of the specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.

(i) Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.

(ii) Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.

(iii) Make adequate provisions to accommodate items scheduled for later installation.
B Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Provide a copy of memoranda to the construction manager. Include such items as required notices, reports, and list of attendees at meetings.

C Administrative Procedures: Coordinate Scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

(i) Preparation of Contractor’s construction schedule.
(ii) Preparation of the schedule of values.
(iii) Installation and removal of necessary temporary facilities and controls for contractors and subcontractors’ scope of work.
(iv) Delivery and processing of Submittals.
(v) Progress meetings will be coordinated and conducted by the construction manager.
(vi) Preinstallation conferences.
(vii) Project closeout activities.
(viii) Startup and adjustment of systems.

D Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

Section 1.05 COORDINATION DRAWINGS

A All contractors are responsible for coordination of all drawings. It is the responsibility of all contractors to review other contractors’ related scopes of work. Information is not limited to the contractors’ drawings and contractors are required to review other contractors’ scopes of work and drawings.

B All contractors are responsible for notifying the construction manager of all deviations from the contract documents. All contractors are responsible for maintaining a construction set. Contractors are responsible for providing the construction manager with a copy of the contractors’ record construction drawings with redline mark-ups.

Section 1.06 REQUEST FOR INFORMATION (RFI’s)

A General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified by the Construction Manager.

(i) All RFI’s must be submitted to the Construction Manager. All RFI’s received directly from the contractor will be returned with no response.

(ii) Coordinate and submit RFI’s in a prompt manner so as to avoid delays in Contractor’s work or work of subcontractors.

B Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

(i) Project Name
(ii) Project Number


(iii) Date

(iv) Name of Contractor

(v) Name of Architect

(vi) RFI Number, numbered Sequentially.

(vii) RFI Subject

(viii) Specification Section number and title and related paragraphs, as appropriate.

(ix) Drawing number and detail references, as appropriate

(x) Field Dimensions and conditions, as appropriate.

(xi) Contractor’s suggested resolution. If Contractor’s suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.

(xii) Contractor’s Signature

(xiii) Attachments as needed to explain the requested information or question, including but not limited to materials, dimensions, thicknesses, and assemblies.

C Architect’s Action: Architect will review each RFI, determine action required, and respond. Allow five working days for Architect’s response for each RFI. RFI’s received after 1:00p.m. will be considered as received the following working day.

(i) The following Contractor generated RFI’s will be returned without action.

   a) Request for approval of Submittals.

   b) Request for approval of Substitutions.

   c) Request for approval of Contractor's means and methods.

   d) Requests for coordination information already indicated in the Contract Documents.

   e) Request for adjustment in the Contract Time or the Contract Sum.

   f) Request for interpretation of Architect’s actions on Submittals.

   g) Incomplete RFI’s or inaccurately prepared RFI’s

D Architect’s action may include a request for additional information, in which case architects time for response will date from time of receipt of additional information.

E An architect’s action on RFI's that may result in a change to the Contract Time, or the Contract sum may be eligible for Contractor to submit Change Proposal. If architects action results in change in contractor time or sum the contractor must notify the construction manager and owner of cost or time change before execution of work. The Contractor is to not proceed with out an approved change order. If the contractor fails to notify the Architect, Owner, and construction manager of cost or time impact and the contractor proceeds then it is assumed there is no cost or time impact. No post approval of a change order will be granted, and the contractor assumes responsibility for cost or time impacts.
(i) Contractor must notify the Architect, Owner, and Construction Manager of impact within 5 days of receipt of RFI’s response.

F RFI Log: Each contractor will be responsible for maintaining a log of their RFI’s. The Construction Manager will maintain a Master Log of all submitted RFI’s.

G The Construction Manager will maintain the response of all RFI’s. Contractor must send back receipt of response within 5 days of receipt.

Section 1.07 PROJECT MEETINGS

A General: The Construction Manager will be responsible for all Owner, Architect, and Contractor meetings. If a meeting is needed to coordinate work, it is the responsibility of the contractor to request said meeting. An agenda must be submitted to the Construction Manager. The agenda must be submitted 3 business days prior to the meeting.

(i) The agenda must include requested attendees and subjects for consideration. The agenda must be submitted to the construction manager.

(ii) The Construction Manager will maintain the minutes of the meeting. The construction manager will distribute the meeting minutes.

B Preconstruction Conference: Contractor is responsible to schedule all preconstruction meetings with the construction manager. The construction manager will coordinate the attendee invites. Preconstruction meetings must be notified 10 days prior to meeting.

(i) Each Contractor must perform a preconstruction meeting before the start of the work. No work can be executed before a preconstruction meeting can be performed. The contractor must describe and explain their scope of work. The contractor must notify the construction manager daily if there are changes to their work.

(ii) If coordination of multiple contractors’ work is required, it is the responsibility of the contractor to contact all coordinating trades and coordinate meetings with the construction manager.

C Safety Meeting: All Contractors are responsible for attending a construction safety meeting weekly. The meeting will be held by the construction manager with the collaboration of the contractor. All contractors are responsible for adherence to all safety standards and guidelines.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 013100
SECTION 013300 – SUBMITTAL PROCEDURES

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY
B DEFINITIONS
C SUBMITTAL SCHEDULE
D SUBMITTAL FORMATS
E SUBMITTAL PROCEDURES
F SUBMITTAL REQUIREMENTS
G DELEGATED DESIGN SERVICES (IF APPLICABLE)
H CONTRACTORS REVIEW
I ARCHITECTS REVIEW

Section 1.02 SUMMARY

A Section Includes:

(i) Submittal schedule requirements.
(ii) Administrative and procedural requirements for submittals.

Section 1.03 DEFINITIONS

A Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."

B Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as " informational submittals."

Section 1.04 SUBMITTAL SCHEDULE

A Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

Section 1.05 SUBMITTAL FORMATS

A Submittal Information: Include the following information in each submittal:

(i) Project name.
(ii) Date.

(iii) Name of Architect.

(iv) Name of Contractor.

(v) Name of firm or entity that prepared submittal.

(vi) Names of subcontractor, manufacturer, and supplier.

(vii) Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier, and alphanumeric suffix for resubmittals.

(viii) Category and type of submittal.

(ix) Submittal purpose and description.

(x) Number and title of Specification Section, with paragraph number and generic name for each of multiple items.

(xi) Drawing number and detail references, as appropriate.

(xii) Indication of full or partial submittal.

(xiii) Location(s) where product is to be installed, as appropriate.

(xiv) Other necessary identification.

(xv) Remarks.

(xvi) Signature of transmitter.

B Options: Identify options requiring selection by Architect.

C Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

D Submittals for Utilizing Web-Based Project Management Software: Prepare submittals as PDF files, or other format indicated by Project management software.

Section 1.06 SUBMITTAL PROCEDURES

A Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

(i) Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.

B Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

(i) Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

(ii) Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
(iii) Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.

C Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

(i) Initial Review: Allow 5 business days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.

(ii) Resubmittal Review: Allow 5 business days for review of each resubmittal.

D Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

E Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

F Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

Section 1.07 SUBMITTAL REQUIREMENTS

A Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

(i) If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.

(ii) Mark each copy of each submittal to show which products and options are applicable.

(iii) Include the following information, as applicable:
   a) Manufacturer's catalog cuts.
   b) Manufacturer's product specifications.
   c) Standard color charts.
   d) Statement of compliance with specified referenced standards.
   e) Testing by recognized testing agency.
   f) Application of testing agency labels and seals.
   g) Notation of coordination requirements.
   h) Availability and delivery time information.

B For equipment, include the following in addition to the above, as applicable:

(i) Wiring diagrams that show factory-installed wiring.

(ii) Printed performance curves.
(iii) Operational range diagrams.

(iv) Clearances required to other construction, if not indicated on accompanying Shop Drawings.

(v) Submit Product Data before Shop Drawings, and before or concurrent with Samples.

C Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

(i) Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

a) Identification of products.

b) Schedules.

c) Compliance with specified standards.

d) Notation of coordination requirements.

e) Notation of dimensions established by field measurement.

f) Relationship and attachment to adjoining construction clearly indicated.

g) Seal and signature of professional engineer if specified.

D Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.

(i) Transmit Samples that contain multiple, related components such as accessories together in one submittal package.

(ii) Identification: Permanently attach label on unexposed side of Samples that includes the following:

a) Project name and submittal number.

b) Generic description of Sample.

c) Product name and name of manufacturer.

d) Sample source.

e) Number and title of applicable Specification Section.

f) Specification paragraph number and generic name of each item.

(iii) Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.

(iv) Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
a) Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.

b) Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

(v) Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

a) Number of Samples: Submit one (1) full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.

(vi) Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

a) Number of Samples: Submit one (1) sets of Samples. Architect will retain one (1) Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record Sample.

1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.

2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of variations.

E Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

F Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

G Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.

H Certificates:

(i) Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.

(ii) Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

a) Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

b) Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
c) Product Certificates: Submit written statements on manufacturer’s letterhead certifying that product complies with requirements in the Contract Documents.

d) Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

I Test and Research Reports:

(i) Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.

(ii) Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

(iii) Material Test Reports: Submit reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

(iv) Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency’s standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

(v) Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

(vi) Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:

a) Name of evaluation organization.

b) Date of evaluation.

c) Time period when report is in effect.

d) Product and manufacturers’ names.

e) Description of product.

f) Test procedures and results.

g) Limitations of use.

Section 1.08 DELEGATED DESIGN SERVICES (IF APPLICABLE)

A Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

(i) If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
B Delegated Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit an electronic copy of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

Section 1.09 CONTRACTOR'S REVIEW

B. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

C. Contractor's Approval: Indicate Contractor's approval for each submittal with indication in web-based Project management software. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

1. Architect will not review submittals received from Contractor that do not have Contractor's review and approval.

Section 1.10 ARCHITECT'S REVIEW

D. Action Submittals: Architect will review each submittal, indicate corrections or revisions required.

1. Submittals by Web-Based Project Management Software: Architect will indicate, on Project management software website, the appropriate action.

   a. Actions taken by indication on Project management software website have the following meanings:

      (i) Informational Submittals: Architect will review each submittal and will not return it or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

E. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.

F. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

G. Architect will return without review submittals received from sources other than Contractor.

H. Submittals not required by the Contract Documents will be returned by Architect without action.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 013300
SECTION 013300 – QUALITY REQUIREMENTS

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY
B DEFINITIONS
C CONFLICTING REQUIREMENTS
D INFORMATIONAL SUBMITTALS
E REPORTS AND DOCUMENTS
F QUALITY ASSURANCE
G QUALITY CONTROL
H SPECIAL TESTS AND INSPECTIONS

Section 1.02 SUMMARY

A Section includes administrative and procedural requirements for quality assurance and quality control.

B Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

(i) Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.

(ii) Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

(iii) Specific test and inspection requirements are specified in this section.

(iv) The Contractor is responsible to provide quality control testing for this project from a certified testing agency. Contractor is responsible for the costs and contract with the certified testing agency.

Section 1.03 DEFINITIONS

A Experienced: When used with an entity or individual, "experienced" unless otherwise further described means having successfully completed a minimum of five (5) previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

B Field Quality-Control Tests and Inspections: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

C Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
(i) Use of trade-specific terminology in referring to a Work result does not require that

D Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria. Unless otherwise indicated, copies of reports of tests or inspections performed for other than the Project do not meet this definition.

E Source Quality-Control Tests and Inspections: Tests and inspections that are performed at the source; for example, plant, mill, factory, or shop.

F Testing Agency: An entity engaged to perform specific tests, inspections, or both. The term "testing laboratory" has the same meaning as the term "testing agency."

G Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

H Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect.

Section 1.04 CONFLICTING REQUIREMENTS

A Conflicting Standards and Other Requirements: If compliance with two or more standards or requirements is specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, inform the Architect regarding the conflict and obtain clarification prior to proceeding with the Work. Refer conflicting requirements that are different, but apparently equal, to Architect for clarification before proceeding.

B Minimum Quantity or Quality Levels: The quantity or quality level shown or specified is the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

Section 1.05 INFORMATIONAL SUBMITTALS

A Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility submitted to authorities having jurisdiction before starting work on the following systems:

(i) Seismic-force-resisting system, designated seismic system, or component listed in the Statement of Special Inspections.

(ii) Main wind-force-resisting system or a wind-resisting component listed in the Statement of Special Inspections.

A. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

B. Permits, Licenses, and Certificates: For Owner's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.
Section 1.06 REPORTS AND DOCUMENTS

A Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:

(i) Date of issue.
(ii) Project title and number.
(iii) Name, address, telephone number, and email address of testing agency.
(iv) Dates and locations of samples and tests or inspections.
(v) Names of individuals making tests and inspections.
(vi) Description of the Work and test and inspection method.
(vii) Identification of product and Specification Section.
(viii) Complete test or inspection data.
(ix) Test and inspection results and an interpretation of test results.
(x) Record of temperature and weather conditions at time of sample taking and testing and inspection.
(xi) Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
(xii) Name and signature of laboratory inspector.
(xiii) Recommendations on retesting and reinspecting.

B Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:

(i) Statement on condition of substrates and their acceptability for installation of product.
(ii) Statement that products at Project site comply with requirements.
(iii) Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
(iv) Results of operational and other tests and a statement of whether observed performance complies with requirements.
(v) Other required items indicated in individual Specification Sections.

C Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:

(i) Statement that equipment complies with requirements.
(ii) Results of operational and other tests and a statement of whether observed performance complies with requirements.
(iii) Other required items indicated in individual Specification Sections.
D Permits, Licenses and Certificates: For Owners records, submit copies of permits, licenses, certifications, inspections reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgements, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the work.

Section 1.07 QUALITY ASSURANCE

A Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

B Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.

C Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

D Installer Qualifications: A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

E Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.

F Testing and Inspecting Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspection indicated, as documented according to ASTM E329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.

G Manufacturer’s Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

H Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect, demonstrate, repair, and perform service on installations of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

I Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:

J Contractor responsibilities include the following:

(i) Provide test specimens representative of proposed products and construction.

(ii) Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.

(iii) When testing is complete, remove test specimens and test assemblies, mockups; do not reuse products on Project.

K Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

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Section 1.08 QUALITY CONTROL

A  Owner Responsibilities: Where quality-control services are indicated as Owner’s responsibility, Owner will engage a qualified testing agency to perform these services.

(i) Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspection they are engaged to perform.

(ii) Costs for retesting and reinspecting construction that replaces or is necessitated by Work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.

B  Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor’s responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.

(i) Engage a qualified testing agency to perform quality-control services.

a) Contractor will not employ same entity engaged by Owner, unless agreed to in writing by Owner.

(ii) Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspection will be performed.

(iii) Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.

(iv) Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.

(v) Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

C  Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.


(i) Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

(ii) Determine the locations from which test samples will be taken and in which in-situ tests are conducted.

(iii) Conduct and interpret tests and inspections and state in each report whether tested and inspected Work complies with or deviates from requirements.

(iv) Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.

(v) Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.

(vi) Do not perform duties of Contractor.
E Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."

F Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.

G Contractor's Associated Requirements and Services: Cooperate with agencies and representatives performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

(i) Access to the Work.

(ii) Incidental labor and facilities necessary to facilitate tests and inspections.

(iii) Adequate quantities of representative samples of materials that require testing and inspection. Assist agency in obtaining samples.

(iv) Facilities for storage and field curing of test samples.

(v) Preliminary design mix proposed for use for material mixes that require control by testing agency.

(vi) Security and protection for samples and for testing and inspection equipment at Project site.

H Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.

(i) Schedule times for tests, inspections, obtaining samples, and similar activities.

Section 1.09 SPECIAL TESTS AND INSPECTIONS

A Special Tests and Inspections: Contractor will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, as indicated in the Statement of Special Inspections attached to this Section, and as follows:

(i) Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.

(ii) Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.

(iii) Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.

(iv) Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.

(v) Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.

(vi) Retesting and reinspecting corrected Work.
Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 SUMMARY

A TEST AND INSPECTION LOG

B REPAIR AND PROTECTION

Section 3.02 TEST AND INSPECTION LOG

A Test and Inspection Log: Prepare a record of tests and inspections. Include the following:

(i) Date test or inspection was conducted.

(ii) Description of the Work tested or inspected.

(iii) Date test or inspection results were transmitted to Architect.

(iv) Identification of testing agency or special inspector conducting test or inspection.

B Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's authorities' having jurisdiction reference during normal working hours.

(i) Submit log at Project closeout as part of Project Record Documents.

Section 3.03 REPAIR AND PROTECTION

A General: On completion of testing, inspection, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

(i) Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."

a) Protect construction exposed by or for quality-control service activities.

b) Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000
SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY

B USE CHARGES

C INFORMATIONAL SUBMITTALS

D QUALITY ASSURANCE

E PROJECT CONDITIONS

Section 1.02 SUMMARY

A Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

Section 1.03 USE CHARGES

A Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Owner’s construction forces, Architect, testing agencies, and authorities having jurisdiction.

Section 1.04 INFORMATIONAL SUBMITTALS

A Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel.

B Project Identification and Temporary Signs: Show fabrication and installation details, including plans, elevations, details, layouts, typestyles, graphic elements, and message content.

C Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

D Moisture- and Mold-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage and mold. Describe delivery, handling, storage, installation, and protection provisions for materials subject to water absorption or water damage.

(i) Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and requirements for replacing water-damaged Work.

(ii) Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.

(iii) Indicate methods to be used to avoid trapping water in finished work.

Section 1.05 QUALITY ASSURANCE
A Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

Section 1.06 PROJECT CONDITIONS

A Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

Part 2. PRODUCTS

Section 2.01 SECTION INCLUDES

A TEMPORARY FACILITIES

B EQUIPMENT

Section 2.02 TEMPORARY FACILITIES

A Field Offices: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

(i) Contractors can provide any field offices as necessary to perform their scope of work. These field offices must be coordinated with the construction manager prior to installation to determine location and available room. The Construction Manager will give final approval of installation.

(ii) If a contractor desires to have a field office on site, contact the construction manager.

B Field Storage Containers: Prefabricated or mobile storage units for storage of materials and tools will be allowed.

(i) Contact the Construction Manager for approval of installation and location.

(ii) Storage Containers must be in good condition and working order.

(iii) Contractor will be responsible for security of container and locking.

Section 2.03 EQUIPMENT

A Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B HVAC Equipment: Provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

(i) Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.

(ii) Heating, Cooling, and Dehumidifying Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction and marked for intended location and application.

C Air-Filtration Units as Required: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.
Part 3. EXECUTION

Section 3.01 SECTION INCLUDES

A TEMPORARY FACILITIES, GENERAL
B INSTALLATION GENERAL
C TEMPORARY UTILITY INSTALLATION
D SUPPORT FACILITIES INSTALLATION

Section 3.02 TEMPORARY FACILITIES, GENERAL
A Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

Section 3.03 INSTALLATION, GENERAL
A Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
B Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.
C Isolation of Work Areas on site: Prevent dust, fumes, and odors from entering occupied areas.

Section 3.04 TEMPORARY UTILITY INSTALLATION
A General: Install temporary service.
(i) Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
B Water Service: Usage of Owner existing water service is allowed.
C Sanitary Facilities: Provide temporary toilets, wash facilities, safety shower and eyewash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
D Temporary Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
(i) Provide temporary dehumidification systems when required to reduce ambient and substrate moisture levels to level required to allow installation or application of finishes and their proper curing or drying.
E Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
F Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
(i) Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

G Electronic Communication Service: Provide secure WiFi wireless connection to internet with provisions for access by Architect and Owner.

Section 3.05 SUPPORT FACILITIES INSTALLATION

A Comply with the following:

(i) Provide construction for temporary field offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E136. Comply with NFPA 241.

(ii) Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B Temporary Roads and Paved Areas as needed: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas as indicated within construction limits indicated on Drawings.

(i) Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.

C Traffic Controls as needed: Comply with requirements of authorities having jurisdiction.

(i) Protect existing site improvements to remain including curbs, pavement, and utilities.

(ii) Maintain access for fire-fighting equipment and access to fire hydrants.

D Parking: Use designated areas on site for parking areas for construction personnel.

E Storage and Staging: Use designated areas of project site for storage and staging needs.

F Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

(i) Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.

(ii) Remove snow and ice as required to minimize accumulations.

G Waste Disposal Facilities: Comply with local jurisdiction requirements.

H Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

(i) Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

I Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

J Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

Section 3.06 SECURITY AND PROTECTION FACILITIES INSTALLATION
A Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

(i) Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.

B Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

C Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.

(i) Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant-protection zones.

(ii) Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

(iii) Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.

(iv) Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

D Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

E Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using materials approved by authorities having jurisdiction.

F Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.

(i) Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.

(ii) Maintain security by limiting number of keys and restricting distribution to authorized personnel. Owner, Architect, Contractor to provide padlock on contractor’s common chain.

a) Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.

b) Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

c) Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

(iii) Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
Section 3.07 MOISTURE AND MOLD CONTROL

A  Moisture and Mold Protection: Protect stored materials and installed Work in accordance with Moisture and Mold Protection Plan.

B  Exposed Construction Period: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
   (i) Protect porous materials from water damage.
   (ii) Protect stored and installed material from flowing or standing water.
   (iii) Keep porous and organic materials from coming into prolonged contact with concrete.
   (iv) Remove standing water from decks.
   (v) Keep deck openings covered or dammed.

C  Partially Enclosed Construction Period: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
   (i) Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
   (ii) Keep interior spaces reasonably clean and protected from water damage.
   (iii) Periodically collect and remove waste containing cellulose or other organic matter.
   (iv) Discard or replace water-damaged material.
   (v) Do not install material that is wet.
   (vi) Discard and replace stored or installed material that begins to grow mold.
   (vii) Perform work in a sequence that allows wet materials adequate time to dry before enclosing the material in gypsum board or other interior finishes.

D  Controlled Construction Period: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
   (i) Control moisture and humidity inside building by maintaining effective dry-in conditions.
   (ii) Use temporary or permanent HVAC system to control humidity within ranges specified for installed and stored materials.
   (iii) Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.

Section 3.08 OPERATION, TERMINATION, AND REMOVAL

A  Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B  Maintenance: Maintain facilities in good operating condition until removal.
(i) Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

(i) Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.

(ii) At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 “Closeout Procedures.”

END OF SECTION 015000
SECTION 017300 – EXECUTION

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY
B DEFINITIONS
C QUALITY ASSURANCE

Section 1.02 SUMMARY

A Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:

(i) Construction layout.
(ii) Field engineering and surveying.
(iii) Installation of the Work.
(iv) Progress cleaning.
(v) Starting and adjusting.
(vi) Protection of installed construction.
(vii) Correction of the Work.

Section 1.03 DEFINITIONS

A Patching: Fitting and repair work required to restore construction to original conditions after installation of subsequent work.

Section 1.04 QUALITY ASSURANCE

A Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

B Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of specified products and equipment.

Part 2. PRODUCTS

Section 2.01 SECTION INCLUDES

A MATERIALS

Section 2.02 MATERIALS

A Comply with requirements specified in other Sections.
(i) For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with sustainable design requirements.

B Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

(i) Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

C Install all products per manufacture recommendations. If there is a conflict between the contract documents and the manufacturer recommendations, contact construction manager and architect for clarification.

Part 3. EXECUTION

Section 3.01 SECTION INCLUDES

A EXAMINATION
B PREPARATION
C CONSTRUCTION LAYOUT
D INSTALLATION
E PROGRESS CLEANING
F STARTING AND ADJUSTING
G PROTECTION OF INSTALLED CONSTRUCTION
H CORRECTION OF WORK

Section 3.02 EXAMINATION

A Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, and other construction affecting the Work.

(i) Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, gas service piping, and water-service piping; underground electrical services; and other utilities.

(ii) Furnish location data for work related to Project that must be performed by public utilities serving Project site.

B Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

(i) Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.

(ii) Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.

(iii) Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
C Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

Section 3.03 PREPARATION

A Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect in accordance with requirements in Section 013100 "Project Management and Coordination."

Section 3.04 CONSTRUCTION LAYOUT

A Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks and existing conditions. If discrepancies are discovered, notify Architect promptly.

B As needed engage a land surveyor experienced in laying out the Work, using the following accepted surveying practices:

(i) Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.

(ii) Establish limits on use of Project site.

(iii) Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.

(iv) Inform installers of lines and levels to which they must comply.

(v) Check the location, level and plumb, of every major element as the Work progresses.

(vi) Notify Architect when deviations from required lines and levels exceed allowable tolerances.

(vii) Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.

D Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

E Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.
Section 3.05 INSTALLATION

A Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

(i) Make vertical work plumb and make horizontal work level.

(ii) Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.

(iii) Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.

B Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C Install products at the time and under conditions that will ensure satisfactory results as judged by Architect. Maintain conditions required for product performance until Substantial Completion.

D Conduct construction operations, so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy of type expected for Project.

E Sequence the Work and allow adequate clearances to accommodate movement of construction items on-site and placement in permanent locations.

F Tools and Equipment: Select tools or equipment that minimize production of excessive noise levels.

G Templates: Obtain and distribute to the parties involved templates for Work specified to be factory prepared and field installed. Check Shop Drawings of other portions of the Work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

H Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions with manufacturer.

(i) Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.

(ii) Allow for building movement, including thermal expansion and contraction.

(iii) Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

I Joints: Make joints of uniform width. Where joint locations in exposed Work are not indicated, arrange joints for the best visual effect, as judged by Architect. Fit exposed connections together to form hairline joints.

Section 3.06 PROGRESS CLEANING

A Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

(i) Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.

(ii) Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
(iii) Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

a) Use containers intended for holding waste materials of type to be stored.

B Site: Maintain Project site free of waste materials and debris.

C Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.

(i) Remove liquid spills promptly.

(ii) Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 017419 "Construction Waste Management and Disposal."

H During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

Section 3.07 STARTING AND ADJUSTING

A Coordinate startup and adjusting of equipment and operating components with requirements in Section 019113 "General Commissioning Requirements."

B Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

C Adjust equipment for proper operation. Adjust operating components for proper operation without binding.

D Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

E Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

Section 3.08 PROTECTION OF INSTALLED CONSTRUCTION
A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Protection of Existing Items: Provide protection and ensure that existing items to remain undisturbed by construction are maintained in condition that existed at commencement of the Work.

C. Comply with manufacturer's written instructions for temperature and relative humidity.

Section 3.09 CORRECTION OF THE WORK

A. Repair or remove and replace damaged, defective, or nonconforming Work. Restore damaged substrates and finishes.

   (i) Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Repair Work previously completed and subsequently damaged during construction period. Repair to like-new condition.

C. Restore permanent facilities used during construction to their specified condition.

D. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

E. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

F. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300
SECTION 017700 – CLOSEOUT PROCEDURE

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY

B ACTION SUBMITTALS

C CLOSEOUT SUBMITTALS

D SUBSTANTIAL COMPLETION PROCEDURES

E FINAL COMPLETION PROCEDURES

F LIST OF INCOMPLETE ITEMS

G SUBMITTAL OF PROJECT WARRANTIES

Section 1.02 SUMMARY

A Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:

(i) Substantial Completion procedures.

(ii) Final completion procedures.

(iii) Warranties.

(iv) Final cleaning.

Section 1.03 ACTION SUBMITTALS

A Contractor’s List of Incomplete Items: Initial submittal at Substantial Completion.

B Certified List of Incomplete Items: Final submittal at Final Completion.

Section 1.04 CLOSEOUT SUBMITTALS

A Certificates of Release: From authorities having jurisdiction.

B Certificate of Insurance: For continuing coverage.

C Field Report: For pest-control inspection.

Section 1.05 SUBSTANTIAL COMPLETION PROCEDURES

A Contractor’s List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor’s "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.
B Submittals Prior to Substantial Completion: Complete the following a minimum of 5 business days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

(i) Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.

(ii) Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.

(iii) Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.

(iv) Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.

(v) Submit testing, adjusting, and balancing records.

(vi) Submit sustainable design submittals not previously submitted.

(vii) Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

C Procedures Prior to Substantial Completion: Complete the following a minimum of 5 business days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

(i) Advise Owner of pending insurance changeover requirements.

(ii) Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.

(iii) Complete startup and testing of systems and equipment.

(iv) Perform preventive maintenance on equipment used prior to Substantial Completion.

(v) Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 017900 "Demonstration and Training."

(vi) Advise Owner of changeover in utility services.

(vii) Participate with Owner in conducting inspection and walkthrough with local emergency responders.

(viii) Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.

(ix) Complete final cleaning requirements.

(x) Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 7 calendar days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
Section 1.06 FINAL COMPLETION PROCEDURES

A Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:

(i) Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."

(ii) Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

(iii) Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.

(iv) Submit pest-control final inspection report.

B Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

Section 1.07 LIST OF INCOMPLETE ITEMS

A Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

(i) Organize list of spaces in sequential order, [starting with exterior areas first] [and] [proceeding from lowest floor to highest floor], listed by room or space number.

(ii) Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.

(iii) Include the following information at the top of each page:

a) Project name.

b) Date.

c) Name of Architect.

d) Name of Contractor.

e) Page number.

(iv) Submit list of incomplete items in the following format:

a) Web-Based Project Software Upload: Utilize software feature for creating and updating list of incomplete items (punch list).

Section 1.08 SUBMITTAL OF PROJECT WARRANTIES
A Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.

B Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.

C Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
   (i) Submit by uploading to web-based project software site.

D Warranties in Paper Form:
   (i) Provide one paper copy to be retained at the project site.
   (ii) Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
      a) Provide additional copies of each warranty to include in operation and maintenance manuals.

Part 2. PRODUCTS

Section 2.01 SECTION INCLUDES
   A MATERIALS

Section 2.02 MATERIALS
   A Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
      (i) Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

Part 3. EXECUTION

Section 3.01 SECTION INCLUDES
   A FINAL CLEANING
   B REPAIR OF WORK

Section 3.02 FINAL CLEANING
   A Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
   B Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
      (i) Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
a) Clean Project site of rubbish, waste material, litter, and other foreign substances.

b) Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.

c) Remove debris and surface dust from limited-access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.

d) Clean flooring, removing debris, dirt, and staining; clean according to manufacturer's recommendations.

e) Vacuum and mop concrete.

f) Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.

g) Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.

h) Remove labels that are not permanent.

i) Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

j) Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.

k) Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.

l) Clean ducts, blowers, and coils.

m) Clean HVAC system in compliance with NADCA ACR.

n) Clean luminaires, lamps, globes, and reflectors to function with full efficiency.

o) Clean strainers.

p) Leave Project clean and ready for occupancy.

C Pest Control: Comply with pest control requirements in Section 015000 "Temporary Facilities and Controls." Prepare written report.

D Construction Waste Disposal: Comply with waste-disposal requirements in Section 017419 "Construction Waste Management and Disposal."

Section 3.03 REPAIR OF THE WORK

A Complete repair and restoration operations required by Section 017300 "Execution" before requesting inspection for determination of Substantial Completion.

END OF SECTION 017700
SECTION 017823 – OPERATION AND MAINTENANCE DATA

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY
B ACTION SUBMITTALS
C CLOSEOUT SUBMITTALS
D FORMAT OF OPERATION AND MAINTENANCE MANUALS
E REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS
F EMERGENCY MANUALS
G SYSTEMS AND EQUIPMENT MANUALS
H SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS
I PRODUCT MAINTENANCE MANUALS

Section 1.02 SUMMARY

A Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

(i) Operation and maintenance documentation directory manuals.

(ii) Emergency manuals.

(iii) Systems and equipment operation manuals.

(iv) Systems and equipment maintenance manuals.

(v) Product maintenance manuals.

Section 1.03 CLOSEOUT SUBMITTALS

A Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.

(i) Architect will comment on whether content of operation and maintenance submittals is acceptable.

(ii) Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.

B Format: Submit operation and maintenance manuals in the following format:

(i) Submit by uploading to web-based project software site. Enable reviewer comments on draft submittals.

(ii) Submit one (1) paper copies. Architect will return one (1) copy.
C Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 3 business days before commencing demonstration and training. Architect will return copy with comments.

   (i) Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within five (5) days of receipt of Architect's comments and prior to commencing demonstration and training.

D Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

Section 1.04 FORMAT OF OPERATION AND MAINTENANCE MANUALS

A Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.

   (i) Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.

   (ii) File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

B Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.

   (i) Binders: Heavy-duty, three-ring, vinyl-covered, post-type binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

   (ii) Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.

      a) If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.

      b) If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

Section 1.05 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

A Organization of Manuals: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

   (i) Title page.

   (ii) Table of contents.

   (iii) Manual contents.

B Title Page: Include the following information:

   (i) Subject matter included in manual.

   (ii) Name and address of Project.
(iii) Name and address of Owner.

(iv) Date of submittal.

(v) Name and contact information for Contractor.

(vi) Name and contact information for Construction Manager.

(vii) Name and contact information for Architect.

(viii) Name and contact information for Commissioning Authority.

(ix) Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.

(x) Cross-reference to related systems in other operation and maintenance manuals.

C Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

D Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

Section 1.06 EMERGENCY MANUALS

A Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

B Content: Organize manual into a separate section for each of the following:

(i) Type of emergency.

(ii) Emergency instructions.

(iii) Emergency procedures.

C Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:

(i) Fire.

(ii) Flood.

(iii) Gas leak.

(iv) Water leak.

(v) Power failure.

(vi) Water outage.
(vii) System, subsystem, or equipment failure.

(viii) Chemical release or spill.

D Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

E Emergency Procedures: Include the following, as applicable:

(i) Instructions on stopping.

(ii) Shutdown instructions for each type of emergency.

(iii) Operating instructions for conditions outside normal operating limits.

(iv) Required sequences for electric or electronic systems.

(v) Special operating instructions and procedures.

Section 1.07 SYSTEMS AND EQUIPMENT OPERATION MANUALS

A Systems and Equipment Operation Manual: Assemble a complete set of data indicating operation of each system, subsystem, and piece of equipment not part of a system. Include information required for daily operation and management, operating standards, and routine and special operating procedures.

B Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

(i) System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.

(ii) Performance and design criteria if Contractor has delegated design responsibility.

(iii) Operating standards.

(iv) Operating procedures.

(v) Operating logs.

(vi) Wiring diagrams.

(vii) Control diagrams.

(viii) Piped system diagrams.

(ix) Precautions against improper use.

(x) License requirements including inspection and renewal dates.

C Descriptions: Include the following:

(i) Product name and model number. Use designations for products indicated on Contract Documents.

(ii) Manufacturer's name.
(iii) Equipment identification with serial number of each component.

(iv) Equipment function.

(v) Operating characteristics.

(vi) Limiting conditions.

(vii) Performance curves.

(viii) Engineering data and tests.

(ix) Complete nomenclature and number of replacement parts.

D Operating Procedures: Include the following, as applicable:

(i) Startup procedures.

(ii) Equipment or system break-in procedures.

(iii) Routine and normal operating instructions.

(iv) Regulation and control procedures.

(v) Instructions on stopping.

(vi) Normal shutdown instructions.

(vii) Seasonal and weekend operating instructions.

(viii) Required sequences for electric or electronic systems.

(ix) Special operating instructions and procedures.

E Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

F Piped Systems: Diagram piping as installed, and identify color coding where required for identification.

Section 1.08 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

A Systems and Equipment Maintenance Manuals: Assemble a complete set of data indicating maintenance of each system, subsystem, and piece of equipment not part of a system. Include manufacturers’ maintenance documentation, preventive maintenance procedures and frequency, repair procedures, wiring and systems diagrams, lists of spare parts, and warranty information.

B Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers’ maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds, as described below.

C Manufacturers’ Maintenance Documentation: Include the following information for each component part or piece of equipment:

(i) Standard maintenance instructions and bulletins; include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include
more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

a) Prepare supplementary text if manufacturers’ standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

(ii) Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.

(iii) Identification and nomenclature of parts and components.

(iv) List of items recommended to be stocked as spare parts.

D Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

(i) Test and inspection instructions.

(ii) Troubleshooting guide.

(iii) Precautions against improper maintenance.

(iv) Disassembly; component removal, repair, and replacement; and reassembly instructions.

(v) Aligning, adjusting, and checking instructions.

(vi) Demonstration and training video recording, if available.

E Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

F Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers’ maintenance documentation and local sources of maintenance materials and related services.

G Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

(i) Include procedures to follow and required notifications for warranty claims.

H Drawings: Prepare drawings supplementing manufacturers’ printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.

Section 1.09 PRODUCT MAINTENANCE MANUALS

A Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

B Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

C Product Information: Include the following, as applicable:
(i) Product name and model number.

(ii) Manufacturer's name.

(iii) Color, pattern, and texture.

(iv) Material and chemical composition.

(v) Reordering information for specially manufactured products.

D Maintenance Procedures: Include manufacturer's written recommendations and the following:

(i) Inspection procedures.

(ii) Types of cleaning agents to be used and methods of cleaning.

(iii) List of cleaning agents and methods of cleaning detrimental to product.

(iv) Schedule for routine cleaning and maintenance.

(v) Repair instructions.

E Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

(i) Include procedures to follow and required notifications for warranty claims.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 017823
SECTION 017839 – PROJECT RECORD AND DOCUMENTATION

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY
B CLOSEOUT SUBMITTALS
C RECORD DRAWINGS
D RECORD SPECIFICATIONS
E MAINTENANCE OF RECORD DOCUMENTS

Section 1.02 SUMMARY

A Section includes administrative and procedural requirements for Project Record Documents, including the following:

(i) Record Drawings.
(ii) Record specifications.
(iii) Record Product Data.

Section 1.03 CLOSEOUT SUBMITTALS

A Record Drawings: Comply with the following:

(i) Number of Copies: Submit three (3) set(s) of marked-up record prints.
(ii) Number of Copies: Submit copies of Record Drawings as follows:

B Final Submittal:

(i) Submit PDF electronic files of scanned record prints and two (2) sets of file prints.
(ii) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.

C Record Specifications: Submit annotated PDF electronic files and two (2) paper copies of Project's Specifications, including addenda and Contract modifications.

Section 1.04 RECORD DRAWINGS

A Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.

(i) Preparation: Mark record prints to show the actual installation, where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
a) Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.

b) Accurately record information in an acceptable drawing technique.

c) Record data as soon as possible after obtaining it.

d) Record and check the markup before enclosing concealed installations.

e) Cross-reference record prints to corresponding photographic documentation.

(ii) Content: Types of items requiring marking include, but are not limited to, the following:

a) Dimensional changes to Drawings.

b) Revisions to details shown on Drawings.

c) Depths of foundations.

d) Locations and depths of underground utilities.

e) Revisions to routing of piping and conduits.

f) Revisions to electrical circuitry.

g) Actual equipment locations.

h) Duct size and routing.

i) Locations of concealed internal utilities.

j) Changes made by Change Order or construction Change Directive.

k) Changes made following Architect’s written orders.

l) Details not on the original Contract Drawings.

m) Field records for variable and concealed conditions.

n) Record information on the Work that is shown only schematically.

(iii) Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.

(iv) Mark record prints with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.

(v) Mark important additional information that was either shown schematically or omitted from original Drawings.

(vi) Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
(i) Record Prints: Organize record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.


(iii) Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.

(iv) Identification: As follows:
   a) Project name.
   b) Date.
   c) Designation "PROJECT RECORD DRAWINGS."
   d) Name of Architect
   e) Name of Contractor.

Section 1.05 RECORD SPECIFICATIONS

A Preparation: Mark Specifications to indicate the actual product installation, where installation varies from that indicated in Specifications, addenda, and Contract modifications.

(i) Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

(ii) Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.

(iii) Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.

(iv) For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.

(v) Note related Change Orders and Record Drawings where applicable.

B Format: Submit record specifications as scanned PDF electronic file(s) of marked-up paper copy of Specifications.

Section 1.06 MAINTENANCE OF RECORD DOCUMENTS

A Maintenance of Record Documents: Store Record Documents in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION
Section 3.01 NOT APPLICABLE

END OF SECTION 017839
SECTION 017900 – DEMOSTRATION AND TRAINING

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY
B INFORMATIONAL SUBMITTALS
C CLOSEOUT SUBMITTALS
D QUALITY ASSURANCE
E COORDINATION
F INSTRUCTION PROGRAM
G PREPARATION
H INSTRUCTION
I DEMONSTRATION AND TRAINING VIDEO RECORDINGS

Section 1.02 SUMMARY

A Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:

(i) Instruction in operation and maintenance of systems, subsystems, and equipment.

(ii) Demonstration and training video recordings.

Section 1.03 INFORMATIONAL SUBMITTALS

A Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.

(i) Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

Section 1.04 CLOSEOUT SUBMITTALS

A Demonstration and Training Video Recordings: Submit one copy (1) within seven (7) days of end of each training module.

(i) At completion of training, submit complete training manual(s) for Owner's use prepared in same paper and PDF file format required for operation and maintenance manuals specified in Section 017823 "Operation and Maintenance Data."
Section 1.05 QUALITY ASSURANCE

A  Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.

B  Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.

C  Pre-instruction Conference: Conduct conference at Project site to comply with in Section 013100 "Project Management and Coordination."

Section 1.06 COORDINATION

A  Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.

B  Coordinate instructors, including providing notification of dates, times, length of instruction, time and course content.

C  Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data have been reviewed and approved by Design Professional.

Section 1.07 INSTRUCTION PROGRAM

A  Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.

B  Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:

(i) Basis of System Design, Operational Requirements, and Criteria: Include the following:
   a) System, subsystem, and equipment descriptions.
   b) Performance and design criteria if Contractor is delegated design responsibility.
   c) Operating standards.
   d) Regulatory requirements.
   e) Equipment function.
   f) Operating characteristics.
   g) Limiting conditions.
   h) Performance curves.

(ii) Documentation: Review the following items in detail:
   a) Emergency Manuals
b) Systems and equipment operation manuals.

c) Product maintenance manuals.

d) Project Record Documents.

e) Identification systems.

f) Warranties and bonds

g) Maintenance service agreements and similar continuing commitments.

(iii) Emergencies: Include the following, as applicable:

a) Instructions on meaning of warnings, trouble indications, and error messages.

b) Instructions on stopping.

c) Shutdown instructions for each type of emergency.

d) Operating instructions for conditions outside of normal operating limits.

e) Sequences for electric or electronic systems.

f) Special operating instructions and procedures.

(iv) Operations: Include the following, as applicable:

a) Startup procedures

b) Equipment or system break-in procedures.

c) Routine and normal operating instructions.

d) Regulation and control procedures.

e) Control sequences.

f) Safety procedures.

g) Instructions for stopping.

h) Normal shutdown instructions.

i) Operating procedures for emergencies.

j) Operating procedures for system, subsystem, or equipment failure.

k) Seasonal and weekend operations.

l) Required sequences for electric or electronic systems.

m) Special operating instructions and procedures.

(v) Adjustments: Include the following, as applicable:
a) Alignments
b) Checking adjustments
c) Noise and Vibration adjustments
d) Economy and efficiency adjustments

(vi) Troubleshooting: Include the following, as applicable:
   a) Diagnostic Instructions
   b) Testing and inspection procedures.

(vii) Maintenance: Include the following, as applicable:
   a) Inspection procedures.
   b) Types of cleaning agents to be used and methods of cleaning.
   c) List of cleaning agents and methods of cleaning detrimental to product.
   d) Procedures for routine cleaning.
   e) Procedures for preventive maintenance.
   f) Procedures for routine maintenance.
   g) Instruction on use of special tools.

(viii) Repairs: Include the following, as applicable:
   a) Diagnosis instructions
   b) Repair Instructions
   c) Disassembly; component removal, repair, and replacement, and reassembly instructions.
   d) Instructions for identifying parts and components.
   e) Review of spare parts needed for operation and maintenance.

Section 1.08 PREPARATION

A Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."

B Set up instructional equipment at the instructional location.

Section 1.09 INSTRUCTION

A Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
B Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

C Scheduling: Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.

(i) Schedule training with Agency through Design Professional with at least ten (10) days' advance notice.

D Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.

E Cleanup: Collect used and leftover educational materials and remove from Project. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

Section 1.10 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

A General: Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.

(i) At beginning of each training module, record each chart containing learning objective and lesson outline.

B Digital Video Recordings: Provide high-resolution, digital video.

(i) Submit video recordings on USB thumb drive.

C Recording: Display continuous running time.

D Preproduced Video Recordings: Provide video recordings used as a component of training modules in same format as recordings of live training.

Part 2. PRODUCTS

Section 2.01 NOT APPLICABLE

Part 3. EXECUTION

Section 3.01 NOT APPLICABLE

END OF SECTION 017900
SECTION 024100 – DEMOLITION

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY

B FIELD CONDITIONS

Section 1.02 SUMMARY

A Section Includes:

(i) Demolition and removal of selected site elements.

Section 1.03 FIELD CONDITIONS

A The owner will occupy portions of the building immediately adjacent to the selective site demolition area. A construction fence will be installed separating the construction area from the demolition zone.

B The existing site is flat with several improved areas.

C Refer to civil sheets showing the site general site demolition to install the site utilities.

D Additional demolition may need to occur for the contractor to conduct their work. It is mandatory for all contractors to conduct a site visit to analyze the site and make recommendations of additional removal need to complete the work noted in the contractor documents.

(i) If additional demolition is needed to complete the proposed work and it is not called out in the drawings it is the responsibility of the contractor to make the construction manager and architect of the additional work. This demolition work needs to be included in the cost to complete the work.

E There are no building structures demolished within the contract documents, unless noted otherwise. Work includes demolition of:

(i) Asphalt
(ii) Concrete Curbs
(iii) Concrete Flatwork
(iv) Topsoil
(v) Chain-link Fencing
(vi) Trees & Shrubs

Section 1.04 Site Walk

A The contractor is responsible for setting up a site walk with the Owner, Construction Manager, and Architect prior to the commencement of any demolition.

Part 2. PRODUCTS

A SOIL MATERIALS

(i) General: Refer to Civil General Notes and electrical site general notes for materials required for this project and scope of demolition.
Part 3. EXECUTION

A Perform site walk prior to any demolition.

B All requested demolished materials, unless otherwise specified, need to be removed from the site.

C The contractor is responsible for all disposal fees.

D The contractor is responsible for any all testing needed to legally dispose of any material.

E The contractor is to legal dispose per local, state, and federal guidelines.

F All fees associated with disposal of material is to be included in the demolition scope of work.

G Coordinate all stockpile material with the owner and construction manager.

END OF SECTION 024100
SECTION 025001 – SITE PHOTOS

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A PHOTOGRAPHS OF SITE

Section 1.02 PHOTOS
ITD District 1
Coeur D Alene

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5 – Electrical line runs next to sidewalk

Photo 6 – Underground Fuel Tank
<table>
<thead>
<tr>
<th>Photo 7 – Trees to be removed</th>
<th>Photo 8 – Utility line markings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo 9 – Trees to be removed</td>
<td>Photo 10 – Pole to be removed</td>
</tr>
<tr>
<td>Photo 11 – Protect existing underground utilities</td>
<td></td>
</tr>
<tr>
<td>Photo 12</td>
<td></td>
</tr>
</tbody>
</table>
Photo 13

Photo 14

Photo 15 – new place for trailers

Photo 16 – new place for trailers

Photo 17 – Utility route

Photo 18 – Communication box
ITD District 1
Coeur D'Alene

Photo 19 – utility markings

Photo 20 – Survey point to remain

Photo 21

Photo 22

Photo 23

Photo 24 – Utility Marking
ITD District 1
Coeur D'Alene

Photo 25 – Mineral Drive Utility Connection
Photo 26 – Water Valves

Photo 27 – Power Pole
Photo 28 – Route for Electrical

Photo 29
Photo 30
Part 2. PRODUCTS
Section 2.01 NOT APPLICABLE

Part 3. EXECUTION
Section 3.01 NOT APPLICABLE

END OF SECTION 025001
SECTION 034700 – SITE CONCRETE

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A RELATED DOCUMENTS

B DEFINITIONS

C INFORMATIONAL SUBMITTALS

Section 1.02 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections.

B Idaho Standards for Public Works Construction (ISPWC).

C City of Coeur d’Alene Standard Drawings and Specifications.

Section 1.03 SUMMARY

A This Section includes exterior cement concrete pavement for the following:

(i) Sidewalks and ramps.

(ii) Curbs and gutters.

(iii) Exterior concrete steps on grade.

(iv) Concrete access drives and driveways.

B Work and materials shall comply with the most current edition of the Idaho Standards for Public Works Construction (ISPWC), and the City of Coeur d’Alene Standard Drawings and Specifications.

C Related Sections include the following:

(i) List below only products and construction that the reader might expect to find in this Section but are specified elsewhere.

(ii) Division 32 Section "Base Ballast and Paving" for paving.

Section 1.04 DEFINITIONS

A Definition below refers to those materials that make up cementitious component of water-cementitious materials ratio.

B Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.

C ISPWC: Idaho Standards for Public Works Construction.

Section 1.05 SUBMITTALS

601 E. Front Ave. Ste. 201 Coeur d’Alene, Idaho 83814 Ph: 208.664.1773 Email: marcn@millerstauffer.com
A Product Data: For each type of manufactured material and product indicated. Include technical data and tested physical and performance properties.

B Design Mixtures: For each concrete pavement mixture. Include alternate mixture designs when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

C Delete paragraph below if no exposed-aggregate finish.

D Coordinate paragraph below with qualification requirements in Division 01 Section "Quality Requirements" and as supplemented in "Quality Assurance" Article.

E Delete paragraph and subparagraph below if material test reports are not required.

F Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance with the specified requirements.

G Retain option in subparagraph below if retaining service record data with "Normal-Weight Aggregates" Paragraph in Part 2 "Concrete Materials" Article.

H Delete paragraph and subparagraphs below if material test reports are not required.

I Material Certificates: Signed by manufacturers certifying that each of materials complies with the specified requirements.

J Edit list below to suit Project.

K Retain paragraph below if Contractor is responsible for field quality-control testing.

L Field quality-control test reports, from a qualified testing agency.

Section 1.06 QUALITY ASSURANCE

A Pre-installation Conference: Conduct conference at Project site.

   (i) Conduct conference at project site. Conference shall include Owner (or their representative), authorities having jurisdiction (City of Coeur D’Alene, etc.), and other affected parties as needed.

   (ii) Review methods and procedures related to concrete paving including, but not limited to, the following:

      a) Review proposed sources of paving materials, including plant capabilities, location of plant that will manufacture concrete and number of trucks hauling concrete to project site.

      b) Review condition of subgrade and preparatory work.

      c) Review requirements for protecting paving work.

      d) Review Contractor’s plan for accomplishing paving work and routing of haul trucks to/from work areas.

      e) Review and finalize construction schedule and verify availability of materials, Installer’s personnel, equipment, and facilities needed to make progress and avoid delays.

   (iii) Manufacturer Qualifications: Manufacturer of ready-mixed concrete products who complies with ASTM C 94/C 94M requirements for production facilities and equipment.

   (iv) Testing Agency Qualifications: An independent agency qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.
Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

Section 1.07 PROJECT CONDITIONS

A Traffic Control: Maintain access for vehicular and pedestrian traffic as required.

Part 2. PRODUCTS

Section 2.01 STEEL REINFORCEMENT

A Reinforcement Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.

B Plain Steel Wire: ASTM A 82, as drawn.

C Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening steel reinforcement. Manufacture bar supports according to CRSI’s “Manual of Standard Practice.”

Section 2.02 FORMS

a) Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.

1) Use flexible or curved forms for curves with a radius 100 feet or less.

b) Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

Section 2.03 CONCRETE MATERIALS

A Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:

(i) Portland Cement: ASTM C 150, Type I or Type II. Comply with ISPWC Section 703. Supplement with the following:

a) Fly Ash: AASHTO M295, Class C or F. Comply with ISPWC Section 703.

b) Ground Granulated Blast-Furnace Slag: AASHTO M 302, Grade 100 or 120. Comply with ISPWC Section 703.


(i) Maximum Coarse-Aggregate Size: 1-1/2 inches nominal.

(ii) Fine Aggregate: Comply with ISPWC Section 703.

(iii) Coarse Aggregate: Comply with ISPWC Section 703.

(iv) Do not use aggregates containing substances that cause spalling.

C Water: ASTM C 94/C 94M.

(i) Comply with ISPWC Section 703.
   (i) Comply with ISPWC Section 703.

E Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material. Comply with ISPWC Section 703.
   (i) Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
   (ii) Retarding Admixture: ASTM C 494/C 494M, Type B.
   (iii) Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
   (iv) High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
   (v) High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.

Section 2.04 CURING MATERIALS

A Curing Materials: Comply with ISPWC Section 703.

B Absorptive Cover: AASHTO M 182, Class 4, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry. Comply with ISPWC Section 703.

C Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet. Comply with ISPWC Section 703.

D Water: Potable.

E Liquid Membrane – Forming Curing Compounds: Comply with ISPWC Section 703.

Section 2.05 RELATED MATERIALS

A Expansion- and Isolation-Joint-Filler Strips: Comply with ISPWC Section 703.

Section 2.06 CURB RAMPS

A Curb ramps shall be of the type specified in the Plans and shall include the detectable warning surface. The detectable warning surface shall have the truncated dome shape shown in the Plans and comply with City of Coeur d’Alene Standard Plans.
   (i) Color: Detectable warning surface shall be yellow in color.

Section 2.07 CONCRETE MIXTURES

A Prepare design mixtures, proportioned according to ACI 211.1 and ACI 301 with the following properties:
   (i) Use a qualified independent testing agency for preparing and reporting proposed concrete mixture designs for the trial batch method.
   (ii) Comply with ISPWC Section 703.
   (iii) Compressive Strength (28 Days): 4,500 psi (per American Concrete Institute standards for exterior concrete).
   (iv) Maximum Water-Cementitious Materials Ratio: 0.45.
(v) Slump Limit: 4 inches.
(vi) Air Content: 4.5 to 7.5 percent.

B Synthetic Fiber (if required): Uniformly dispersed in concrete mix at manufacturer’s recommended rate, but not less than 1.0 lb/cu. Yd. (0.60 kg/cu. M).

C Proportion mixtures to provide normal-weight concrete with the following properties:

(i) Mixture proportioning shall be as defined in ISPWC Section 703 for all components of the Contractor Mix Design.

D Add air-entraining admixture at manufacturer’s prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:

(i) Air Content: 4.5 percent to 7.5 percent per WAQTC FOP for AASHTO T 152.

E Chemical Admixtures: Use admixtures according to manufacturer's written instructions.

Section 2.08 CONCRETE SEALER

A A concrete sealer shall protect against staining and have a matt finish. The concrete sealer shall be SealTight CS-309-25 by W. R. Meadows, Inc. or equal. If any smooth finished concrete is installed the sealer shall include the slip resistant additive SealTight Sure-Step by W. R. Meadows, Inc. or equal.

Section 2.09 CONCRETE MIXING

A Retain option in paragraph below if synthetic fibers are required.

B Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Comply with ISPWC Section 703. Furnish batch certificates for each batch discharged and used in the Work.

C Delete Project-site mixing below if not permitted. ACI 301 applies requirements in ASTM C 94/C 94M to site-produced concrete.

D Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Comply with ISPWC Section 703.

Part 3. EXECUTION

Section 3.01 EXAMINATION

A Examine exposed subgrades and base surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

B Proof-roll subgrade below concrete pavements to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

(i) Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Geotechnical Testing Agency, and replace with compacted backfill or fill as directed.

C Proceed with concrete pavement operations only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.
Section 3.02 PREPARATION

A. Remove loose material from compacted base surface immediately before placing concrete.

B. Reinforcement: Accurately position and support reinforcement, and secure against displacement. Set wire ties with ends directed into concrete.
   (i) Install welded wire fabric in lengths as long as is practicable; lap at least one full mesh, and lace splices with wire.

Section 3.03 EDGE FORMS AND SCREED CONSTRUCTION

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

Section 3.04 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated. Comply with ISPWC Section 703.
   (i) When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.

B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints. Comply with ISPWC Section 703.

C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated. Comply with ISPWC Section 703.
   (i) Locate expansion joints at intervals of 50 feet, unless otherwise indicated.
   (ii) Extend joint fillers full width and depth of joints.
   (iii) Terminate joint filler less than ½ inch or more than 1 inch below finished surface if joint sealant is indicated.
   (iv) Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
   (v) Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint filler sections together.
   (vi) Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.

D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Comply with ISPWC Section 703. Comply with ISPWC Section 703 for sealing sawed contraction joints.

E. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to a radius in accordance with ISPWC Standard Plans. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.

Section 3.05 CONCRETE PLACEMENT
A Inspection: Before placing concrete, inspect and complete formwork installation and items to be embedded or cast in. Notify other trades to permit installation of their work.

B Remove snow, ice, or frost from base surface before placing concrete. Do not place concrete on frozen surfaces.

C Moisten base to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

D Comply with ISPWC Section 703 and ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

E Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

F Consolidate concrete according to ISPWC Section 703 and ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.

(i) Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.

G Screed pavement surfaces with a straightedge and strike off.

H Commence initial floating using bull floats or darbies to impart an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

I Curbs and Gutters: When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified for formed concrete. If results are not approved, remove and replace with formed concrete.

J Cold-Weather Placement: Comply with ISPWC Section 703, ACI 306.1, and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

(i) Do not use frozen materials or materials containing ice or snow.

(ii) Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mix designs.

K Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:

(i) Fog-spray forms and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

Section 3.06 FLOAT FINISHING

A General: Do not add water to concrete surfaces during finishing operations.

B Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
(i) Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

Section 3.07 CONCRETE PROTECTION AND CURING

A General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B Comply with ISPWC Section 703 and ACI 306.1 for cold-weather protection.

C Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

D Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
   (i) Moist Curing: Comply with ISPWC Section 703.
   (iii) Moisture-Retaining-Cover Curing: Comply with ISPWC Section 703.
   (iv) Curing Compound: Comply with ISPWC Section 703.

Section 3.08 PAVEMENT TOLERANCES

A Comply with tolerances of ISPWC Section 703, ACI 117 and as follows:
   (i) Elevation: 1/4 inch.
   (iii) Surface: Gap below 10-foot - long, unleveled straightedge not to exceed 1/4 inch.
   (iv) Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
   (v) Vertical Alignment of Tie Bars and Dowels: 1/4 inch.
   (vi) Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: 1/2 inch.
   (vii) Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel 1/4 inch per 12 inches.
   (viii) Joint Spacing: 3 inches.
   (ix) Contraction Joint Depth: Plus 1/4 inch, no minus.
   (x) Joint Width: Plus 1/8 inch, no minus.

Section 3.09 FIELD QUALITY CONTROL

A Testing Agency: Owner will engage and pay for a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

B Field quality control, testing, and inspections shall comply with ISPWC Standard Specifications.

C Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
(i) Testing Frequency: Obtain at least 1 composite sample for each 100 cu. yd. or fraction thereof of each concrete mix placed each day.

(ii) Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day’s pour of each concrete mix. Perform additional tests when concrete consistency appears to change.

(iii) Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day’s pour of each concrete mix.

(iv) Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.

D Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing.

E Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate requirements have not been met.

F Remove and replace concrete pavement where test results indicate that it does not comply with specified requirements.

G Additional testing and inspecting, at Contractor’s expense, will be performed to determine compliance of replaced or additional work with specified requirements.

Section 3.10 REPAIRS AND PROTECTION

A Remove and replace concrete pavement that is broken, damaged, or defective or that does not comply with requirements in this Section.

B Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.

C Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

Section 3.11 DISPOSAL

A Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

END OF SECTION 034700
SECTION 260000 – ELECTRICAL

Part 1.   GENERAL

Section 1.01 SECTION INCLUDES

A   SUMMARY

Section 1.02 SUMMARY

A   Section Includes:

   (i) Site Development Electrical & Common electrical installation requirements

Section 1.03 SCOPE OF WORK

A   This project is divided into two phases:

   (i) Site Development (Current Scope)

      a) The Site development phase of this project includes the following scopes:

         1) Power Utility Feed for Building
         2) Power Utility Feed for Testing Trailers & Temporary Power for Job Trailer
         3) Underground conduit for Telecommunications from adjacent Residency Lab (Existing) located Southwest from the building site.

            i) Provide Empty PVC Conduit with pull string as shown for future telecommunications. Communications lines to be installed at a later date.

   (ii) Building Development (Future Scope)

      a) Future electrical packages will be coming out denoting the construction of a Soils testing laboratory facility. This building will be a block structure with wood framing.

Section 1.04 SUBMITTALS

A   Product Data & Informational Data for all materials to be used in the construction.

Section 1.05 QUALITY ASSURANCE

A   All construction to be constructed per National Electrical Standards and National Electrical Code (NEC).

B   All construction to be constructed per State of Idaho Codes and requirements.

C   The contractor shall provide a manufacturer-written warranty for all installed products.

D   If a subcontractor is utilized for any portion of the work, all contact information, references, material list, and any other information shall be provided per the specified contract bid requirements.
Section 1.06 PERMITTING

A State of Idaho Division of Occupational Professional Licensing (DOPL) is the permitting agency for this project. They will be performing all permits for this project.

B The electrical contractor will be responsible for securing all electrical permits needed to complete the scope of work shown and listed in the contract documents.

(i) The cost of the permit is to be included in the scope of work.

Section 1.07 SPECIAL TESTING

A The Owner will provide Special Testing and Observation on this project. The owner will provide an initial test. If the testing fails it is the responsibility of the electrical contractor to re-test once the construction has been corrected. This includes additional tests upon each failure.

Section 1.08 GENERAL

A Comply with NEC, NFPA, and OSHA regulations.

Part 2. PRODUCTS

Section 2.01 GENERAL

A Refer to Electrical General Notes for material information. If a material specification is not available in the contract documents make the Architect, Engineer, and Construction Manager aware of the need for information through a Request for Information (RFI).

B All Materials and equipment provided under this contract shall be new (Except where otherwise noted) and shall be listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL) to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established. Materials and equipment which are not covered by UL Standards will not be accepted.

C All appropriate materials, products, and equipment being installed which fall into a category covered by the ENERGY STAR program shall be provided and labeled as such.

D All equipment of the same type and capacity shall be by the same manufacturer.

E Owner furnished equipment: Equipment furnished by the Owner shall be received, stored, uncrated, protected, and installed by the Contractor with all appurtenances required to place the equipment in operation, ready for use. The Contractor shall be responsible for the equipment as if he had purchased the equipment himself and shall hold the warranty.

Part 3. EXECUTION

Section 3.01 GENERAL

A All work shall be installed a neat, workman like manner in accordance with NEC (2017) Electrical & IECC (2018).

B The contractor shall provide scaffolding, staging, cribbing, tackle, hoists, and rigging necessary for placing of his materials and equipment in their proper places in the project.
C. The contractor shall pay costs for transportation of materials and equipment to the job site and shall include such costs in his or her proposal.

D. Scaffolding and hoisting equipment shall be in good working order and comply with all requirements of pertinent Federal, State, and local laws and regulations.

E. Where any device or part of equipment is referred to in these specifications in the singular number (e.g., “the switch”), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.

F. During construction the contractor shall at all times maintain electrical utilities to the site without interruption. Should it be necessary to interrupt any electrical service or utility, the contractor shall secure permission in writing from Idaho Transportation Department for such interruption at least ten (10) business days in advance. Any interruption shall be made with the minimum amount of inconvenience to the owner and any shut-down time shall have to be on a premium time basis and such time to be included in the contractor’s bid. Arrange to provide and pay for a temporary power source as required to complete construction noted in the contract documents.

G. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall mounted items.

H. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements and shall be coordinated with NU Electric Shop.

I. Working clearance around equipment shall not be less than that specified in the N.E.C. for all voltages specified.

J. The locations of switches, receptacles, lights, motors, etc. outlets shown are approximate. The contractor shall use good judgment in placing the preceding items to eliminate all interference with ducts, piping, etc. The contractor shall check all door swings so that light switches are not located behind doors. Relocate switches as required, with approval from the Design Professional. The Owner may direct relocation of outlets before installation, up to five (5) feet from the position indicated on the Drawings, without additional cost.

K. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity. Normal maintenance shall not require the removal of protective guards from adjacent equipment. Install equipment as close as practical to the locations shown on the Drawings.

(i) Where the Owner or Construction Manager determines that the Contractor has installed equipment not conveniently accessible for operations and maintenance, the equipment shall be removed and reinstalled as directed at no additional cost to the Owner.

(ii) “Conveniently Accessible” is defined as being capable of being reached without climbing or crawling over or under obstacles such as motors, pumps, belt guards, transformers, racks, piping, ductwork, raceways or similar.

L. Right of Way: Give piping systems installed at a required slope.

M. Install all conduits in a clean and efficient manner. Make all bends minimal as possible. Conduit that is next to each other have them follow the same sweep to maintain high visual appearance. Great care to be take in the installation of all conduits, equipment, and fixtures to maintain a clean appearance.

N. Provide necessary clearance for future maintenance. If a conflict occurs notify Engineer, Architect, and Construction Manager.
SECTION 270000 – COMMUNICATIONS

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary conditions and other Division 00 and 01 specification sections, apply to this section.

Section 1.02 SUMMARY

A When equipment is furnished for or by the Owner as indicated on the Drawings or specified, this Contractor shall make all connections to Owner furnished equipment. The Contractor shall verify exact requirements and locations before installation.

B Related Sections includes the following:

(i) Division 1 General Requirements

(ii) Division 26 Electrical

(iii) Division 27 Communications

(iv) Division 28 Electronic Safety and Security

Section 1.03 SCOPE OF WORK

A This project is divided into two phases:

(i) Site Development (Current Scope)

a) The Site development phase of this project includes the following scopes:

1) Power Utility Feed for Building

2) Power Utility Feed for Testing Trailers & Temporary Power for Job Trailer

3) Underground conduit for Telecommunications from adjacent Residency Lab (Existing) located Southwest from the building site.

   i) Provide Empty PVC Conduit with pull string as shown for future telecommunications. Communications lines to be installed at a later date.


(ii) Building Development (Future Scope)

a) Future electrical packages will be coming out denoting the construction of a Soils testing laboratory facility. This building will be a block structure with wood framing.

Section 1.04 SUBMITTALS

A Product Data & Informational Data for all materials to be used in the construction.
Section 1.05 QUALITY ASSURANCE

A All construction is to be constructed per National Electrical Standards and National Electrical Code (NEC).

B All construction is to be constructed per State of Idaho Codes and requirements.

C The contractor shall provide a manufacturer-written warranty for all installed products.

D If a subcontractor is utilized for any portion of the work, all contact information, references, material list, and any other information shall be provided per the specified contract bid requirements.

Section 1.06 PERMITTING

A State of Idaho Division of Occupational Professional Licensing (DOPL) is the permitting agency for this project. They will be performing all permits for this project.

B The electrical contractor will be responsible for securing all electrical permits needed to complete the scope of work shown and listed in the contract documents.

(i) The cost of the permit is to be included in the scope of work.

Section 1.07 SPECIAL TESTING

A The Owner will provide Special Testing and Observation on this project. The owner will provide an initial test. If the testing fails it is the responsibility of the electrical contractor to re-test once the construction has been corrected. This includes additional tests upon each failure.

Section 1.08 GENERAL

A Comply with NEC, NFPA, and OSHA regulations.

Part 2. PRODUCTS

Section 2.01 GENERAL

A Refer to Electrical General Notes for material information. If a material specification is not available in the contract documents make the Architect, Engineer, and Construction Manager aware of the need for information through a Request for Information (RFI).

B All Materials and equipment provided under this contract shall be new (Except where otherwise noted) and shall be listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL) to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established. Materials and equipment which are not covered by UL Standards will not be accepted.

C All appropriate materials, products, and equipment being installed which fall into a category covered by the ENERGY STAR program shall be provided and labeled as such.

D All equipment of the same type and capacity shall be by the same manufacturer.

E Owner furnished equipment: Equipment furnished by the Owner shall be received, stored, uncrated, protected, and installed by the Contractor with all appurtenances required to place the equipment in operation, ready for use. The Contractor shall be responsible for the equipment as if he had purchased the equipment himself and shall hold the warranty.
Part 3. EXECUTION

Section 3.01 GENERAL

A  All work shall be installed a neat, workman like manner in accordance with NEC (2017) Electrical & IECC (2018).

B  Contractor shall provide scaffolding, staging, cribbing, tackle, hoists, and rigging necessary for placing of his materials and equipment in their proper places in the project.

C  Contractor shall pay costs for transportation of materials and equipment to the job site and shall include such costs in his or her proposal.

D  Scaffolding and hoisting equipment shall be in good working order and comply with all requirements of pertinent Federal, State, and local laws and regulations.

E  Where any device or part of equipment is referred to in these specifications in the singular number (e.g., “the switch”), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.

F  During construction the contractor shall at all times maintain electrical utilities to the site without interruption. Should it be necessary to interrupt any electrical service or utility, the contractor shall secure permission in writing from Idaho Transportation Department for such interruption at least ten (10) business days in advance. Any interruption shall be made with the minimum amount of inconvenience to the owner and any shut-down time shall have to be on a premium time basis and such time to be included in the contractor’s bid. Arrange to provide and pay for a temporary power source as required to complete construction noted in the contract documents.

G  Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall mounted items.

H  Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements and shall be coordinated with NU Electric Shop.

I  Working clearance around equipment shall not be less than that specified in the N.E.C. for all voltages specified.

J  The locations of switches, receptacles, lights, motors, etc. outlets shown are approximate. The contractor shall use good judgment in placing the preceding items to eliminate all interference with ducts, piping, etc. The contractor shall check all door swings so that light switches are not located behind doors. Relocate switches as required, with approval from the Design Professional. The Owner may direct relocation of outlets before installation, up to five (5) feet from the position indicated on the Drawings, without additional cost.

K  Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity. Normal maintenance shall not require the removal of protective guards from adjacent equipment. Install equipment as close as practical to the locations shown on the Drawings.

(i) Where the Owner or Construction Manager determines that the Contractor has installed equipment not conveniently accessible for operations and maintenance, the equipment shall be removed and reinstalled as directed at no additional cost to the Owner.

(ii) “Conveniently Accessible” is defined as being capable of being reached without climbing or crawling over or under obstacles such as motors, pumps, belt guards, transformers, racks, piping, ductwork, raceways or similar.

L  Right of Way: Give piping systems installed at a required slope.
M Install all conduits in a clean and efficient manner. Make all bends minimal as possible. Conduit that is next to each other have them follow the same sweep to maintain high visual appearance. Great care to be take in the installation of all conduits, equipment, and fixtures to maintain a clean appearance.

N Provide necessary clearance for future maintenance. If a conflict occurs notify Engineer, Architect, and Construction Manager.

END OF SECTION 270000
SECTION 280000 – ELECTRONIC SAFETY AND SECURITY

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary conditions and other Division 00 and 01 specification sections, apply to this section.

Section 1.02 SUMMARY

A When equipment is furnished for or by the Owner as indicated on the Drawings or specified, this Contractor shall make all connections to Owner furnished equipment. The Contractor shall verify exact requirements and locations before installation.

B Related Sections includes the following:

(i) Division 1 General Requirements
(ii) Division 26 Electrical
(iii) Division 27 Communications
(iv) Division 28 Electronic Safety and Security

Section 1.03 SCOPE OF WORK

A The scope of work to be performed is to install empty conduit with pull string for future owner supplied vendor construction.

(i) Conduits to include the following:

a) (2) 1” Power & Data Conduit from Future Building IT Room to Overhead Lift Gate
b) (2) 1” Power & Data Conduit for Two Man Gates to the Future Building IT Room.

(ii) ATEC is the Building Vendor and will be responsible for installation of the Access Control System.

a) www.a-tec.net
b) 104 N. Hutchinson Rd. Spokane Valley, Washington 99212
c) Phone: (509) 928-5400
d) Email: kevinj@a-tec.net

B All Access control will be home run back to Building and connected to the building’s communications access to the web.

C There are no security systems on this project or the future building.

D This project is divided into two phases:

(i) Site Development (Current Scope)
a) The Site development phase of this project includes the following scopes:

1) Power Utility Feed for Building

2) Power Utility Feed for Testing Trailers & Temporary Power for Job Trailer

3) Underground conduit for Telecommunications from adjacent Residency Lab (Existing) located Southwest from the building site.
   i) Provide Empty PVC Conduit with pull string as shown for future telecommunications. Communications lines to be installed at a later date.


(ii) Building Development (Future Scope)

a) Future electrical packages will be coming out denoting the construction of a Soils testing laboratory facility. This building will be a block structure with wood framing.

Section 1.04 SUBMITTALS

A Product Data & Informational Data for all materials to be used in the construction.

Section 1.05 QUALITY ASSURANCE

A All construction is to be constructed per National Electrical Standards and National Electrical Code (NEC).

B All construction is to be constructed per State of Idaho Codes and requirements.

C The contractor shall provide a manufacturer-written warranty for all installed products.

D If a subcontractor is utilized for any portion of the work, all contact information, references, material list, and any other information shall be provided per the specified contract bid requirements.

Section 1.06 PERMITTING

A State of Idaho Division of Occupational Professional Licensing (DOPL) is the permitting agency for this project. They will be performing all permits for this project.

B The electrical contractor will be responsible for securing all electrical permits needed to complete the scope of work shown and listed in the contract documents.
   (i) The cost of the permit is to be included in the scope of work.

Section 1.07 SPECIAL TESTING

A The Owner will provide Special Testing and Observation on this project. The owner will provide an initial test. If the testing fails it is the responsibility of the electrical contractor to re-test once the construction has been corrected. This includes additional tests upon each failure.

Section 1.08 GENERAL

A Comply with NEC, NFPA, and OSHA regulations.
Part 2.            PRODUCTS

Section 2.01 GENERAL

A Refer to Electrical General Notes for material information. If a material specification is not available in the contract documents make the Architect, Engineer, and Construction Manager aware of the need for information through a Request for Information (RFI).

B All Materials and equipment provided under this contract shall be new (Except where otherwise noted) and shall be listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL) to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established. Materials and equipment which are not covered by UL Standards will not be accepted.

C All appropriate materials, products, and equipment being installed which fall into a category covered by the ENERGY STAR program shall be provided and labeled as such.

D All equipment of the same type and capacity shall be by the same manufacturer.

E Owner furnished equipment: Equipment furnished by the Owner shall be received, stored, uncrated, protected, and installed by the Contractor with all appurtenances required to place the equipment in operation, ready for use. The Contractor shall be responsible for the equipment as if he had purchased the equipment himself and shall hold the warranty.

Part 3.            EXECUTION

Section 3.01 GENERAL

A All work shall be installed a neat, workman like manner in accordance with NEC (2017) Electrical & IECC (2018).

B The contractor shall provide scaffolding, staging, cribbing, tackle, hoists, and rigging necessary for placing his materials and equipment in their proper places in the project.

C The contractor shall pay costs for transportation of materials and equipment to the job site and shall include such costs in his or her proposal.

D Scaffolding and hoisting equipment shall be in good working order and comply with all requirements of pertinent Federal, State, and local laws and regulations.

E Where any device or part of equipment is referred to in these specifications in the singular number (e.g., “the switch”), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.

F During construction the contractor shall at all times maintain electrical utilities to the site without interruption. Should it be necessary to interrupt any electrical service or utility, the contractor shall secure permission in writing from Idaho Transportation Department for such interruption at least ten (10) business days in advance. Any interruption shall be made with the minimum amount of inconvenience to the owner and any shut-down time shall have to be on a premium time basis and such time to be included in the contractor’s bid. Arrange to provide and pay for a temporary power source as required to complete construction noted in the contract documents.

G Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall mounted items.

H Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements and shall be coordinated with NU Electric Shop.
I  Working clearance around equipment shall not be less than that specified in the N.E.C. for all voltages specified.

J  The locations of switches, receptacles, lights, motors, etc. outlets shown are approximate. The contractor shall use good judgment in placing the preceding items to eliminate all interference with ducts, piping, etc. The contractor shall check all door swings so that light switches are not located behind doors. Relocate switches as required, with approval from the Design Professional. The Owner may direct relocation of outlets before installation, up to five (5) feet from the position indicated on the Drawings, without additional cost.

K  Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity. Normal maintenance shall not require the removal of protective guards from adjacent equipment. Install equipment as close as practical to the locations shown on the Drawings.

(i) Where the Owner or Construction Manager determines that the Contractor has installed equipment not conveniently accessible for operations and maintenance, the equipment shall be removed and reinstalled as directed at no additional cost to the Owner.

(ii) “Conveniently Accessible” is defined as being capable of being reached without climbing or crawling over or under obstacles such as motors, pumps, belt guards, transformers, racks, piping, ductwork, raceways or similar.

L  Site Piping: Give piping systems installed at a required slope.

M  Provide Handholds as necessary to complete the system and provide proper access for maintenance.

N  Install all conduits in a clean and efficient manner. Make all bends minimal as possible. Conduit that is next to each other have them follow the same sweep to maintain high visual appearance. Great care to be take in the installation of all conduits, equipment, and fixtures to maintain a clean appearance.

O  Provide necessary clearance for future maintenance. If a conflict occurs notify Engineer, Architect, and Construction Manager.

END OF SECTION 280000
SECTION 311000 - SITE CLEARING

Part 1. GENERAL

Section 1.01 SUMMARY

A Section Includes:

(i) Protecting existing vegetation to remain.

(ii) Removing existing vegetation.

(iii) Clearing and grubbing.

(iv) Stripping and stockpiling topsoil.

(v) Removing above- and below-grade site improvements.

(vi) Disconnecting, capping, or sealing site utilities.

(vii) Temporary erosion and sedimentation control.

Section 1.02 MATERIAL OWNERSHIP

A Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

Section 1.03 FIELD CONDITIONS

A Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

(i) Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.

(ii) Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.

B Traffic Control Plan: For all City of Coeur d'Alene Right of Way closures either partial or full contractor shall provide a traffic control plan. Plans must be submitted to construction manager, owner, architect, and City of Coeur d'Alene for approval.

C Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

D Do not commence site clearing operations until temporary erosion and sedimentation control and plant protection measures are in place.

E Existing Trees and Plant Protection Zones: Protect all existing trees shown to remain. Provide construction fencing around trees to remain.
(i) Provide ample buffer to eliminate damage to tree branches.
(ii) Do not drive over any tree roots or over the tree drip line.
(iii) If work needs to be done within the protected areas. Notify the construction manager and architect of anticipated work. Do not execute work until approval to work has been given.

Part 2. PRODUCTS

Section 2.01 MATERIALS
A Provide all necessary materials called out in the civil sheet general notes and drawings.

Part 3. EXECUTION

Section 3.01 PREPARATION
A Protect and maintain benchmarks and survey control points from disturbance during construction.
B Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed.
C Protect existing site improvements to remain from damage during construction.
   (i) Restore damaged improvements to their original condition, as acceptable to Owner.

Section 3.02 TEMPORARY EROSION AND SEDIMENTATION CONTROL
A Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion and sedimentation control Drawings and requirements of authorities having jurisdiction.
B Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
C Inspect, maintain, and repair erosion and sedimentation-control measures during construction until permanent vegetation has been established.
D Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

Section 3.03 TREE AND PLANT PROTECTION
A Protect trees and plants remaining on-site with snow fencing.
B The contractor is responsible for all trees that are damaged during construction operations. Notify the construction manager of all damage.

Section 3.04 EXISTING UTILITIES
A Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
   (i) Arrange with utility companies to shut off indicated utilities.
B Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

(i) Notify Architect not less than two days in advance of proposed utility interruptions.

(ii) Do not proceed with utility interruptions without Architect's written permission.

Section 3.05 CLEARING AND GRUBBING

A Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.

(i) Grind down stumps and remove roots larger than 3 inches (75 mm) in diameter, obstructions, and debris to a depth of 18 inches (450 mm) below exposed subgrade.

(ii) Use only hand methods or air spade for grubbing within protection zones.

B Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

(i) Place fill material in horizontal layers not exceeding a loose depth of 8 inches (200 mm), and compact each layer to a density equal to adjacent original ground.

Section 3.06 TOPSOIL STRIPPING

A Remove sod and grass before stripping topsoil.

B Strip topsoil in areas shown for concrete flatwork, future building footprint, and asphalt areas.

C Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

Section 3.07 SITE IMPROVEMENTS

A Remove existing above and below grade improvements as indicated and necessary to facilitate new construction.

Section 3.08 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 311000

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SECTION 312000 – EARTH MOVING

Part 1. GENERAL

Section 1.01 SECTION INCLUDES

A SUMMARY

B DEFINITIONS

C INFORMATIONAL SUBMITTALS

Section 1.02 SUMMARY

A Section Includes:

(i) Excavating and filling for rough grading the Site.

(ii) Preparing subgrades for slabs-on-grade walks pavements turf and grasses and plants.

(iii) Excavating and backfilling for buildings and structures.

(iv) Drainage course for concrete slabs-on-grade.

(v) Subbase course for concrete walks pavements.

(vi) Subbase course and base course for asphalt paving.

(vii) Excavating and backfilling trenches for utilities and pits for buried utility structures.

Section 1.03 DEFINITIONS

A Backfill: Soil material used to fill an excavation.

(i) Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.

(ii) Final Backfill: Backfill placed over initial backfill to fill a trench.

B Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

C Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

(i) Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
(ii) Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

G Fill: Soil materials used to raise existing grades.

H Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

J Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.

K Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

Section 1.04 INFORMATIONAL SUBMITTALS

a) Material test reports.

Part 2. PRODUCTS

A SOIL MATERIALS

(i) General: Refer to Civil General Notes and electrical site general notes for materials required for this project.

Part 3. EXECUTION

Section 3.01 PREPARATION

A Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.

B Protect and maintain erosion and sedimentation controls during earth-moving operations.

C Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

Section 3.02 EXCAVATION, GENERAL

A Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

(i) If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

Section 3.03 EXCAVATION FOR STRUCTURES

A Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch (25 mm). If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
(i) Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.

Section 3.04 EXCAVATION FOR WALKS AND PAVEMENTS

A Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

Section 3.05 EXCAVATION FOR UTILITY TRENCHES

A Excavate trenches to indicated gradients, lines, depths, and elevations.

B Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches (300 mm) higher than top of pipe or conduit unless otherwise indicated.

(i) Clearance: 12 inches (300 mm) each side of pipe or conduit, unless otherwise indicated.

C Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

(i) Excavate trenches 6 inches (150 mm) deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

D Trenches in Tree- and Plant-Protection Zones:

(i) Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

(ii) Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

(iii) Cut and protect roots according to requirements in Section 015639 “Temporary Tree and Plant Protection.”

Section 3.06 SUBGRADE INSPECTION

A Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired dump truck to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

B Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

Section 3.07 UNAUTHORIZED EXCAVATION

A Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi (17.2 MPa), may be used when approved by Architect.

(i) Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

Section 3.08 STORAGE OF SOIL MATERIALS

A Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
(i) Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

Section 3.09 UTILITY TRENCH BACKFILL

A Place backfill on subgrades free of mud, frost, snow, or ice.

B Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C Trenches under Footings: Backfill trenches excavated under footings and within 18 inches (450 mm) of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings. Concrete is specified in Section 033000 "Cast-in-Place Concrete."

D Trenches under Roadways: Provide 4-inch- (100-mm-) thick, concrete-base slab support for piping or conduit less than 30 inches (750 mm) below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches (100 mm) of concrete before backfilling or placing roadway subbase course. Concrete is specified in Section 033000 "Cast-in-Place Concrete."

E Initial Backfill: Place and compact initial backfill of satisfactory soil, free of particles larger than 1 inch (25 mm) in any dimension, to a height of 12 inches (300 mm) over the pipe or conduit.

   (i) Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

F Final Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.

Section 3.10 SOIL FILL

A Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B Place and compact fill material in layers to required elevations as follows:

   (i) Under grass and planted areas, use satisfactory soil material.

   (ii) Under walks and pavements, use satisfactory soil material.

   (iii) Under steps and ramps, use engineered fill.

   (iv) Under building slabs, use engineered fill.

   (v) Under footings and foundations, use engineered fill.

Section 3.11 SOIL MOISTURE CONTROL

A Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

   (i) Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

   (ii) Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

Section 3.12 COMPACTION OF SOIL BACKFILLS AND FILLS

601 E. Front Ave. Ste. 201 Coeur d’Alene, Idaho 83814 Ph: 208.664.1773 Email: marcn@millerstauffer.com
A Place backfill and fill soil materials in layers as indicated in Civil General Notes and Geotechnical Evaluation.

B Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.

C Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D698.

Section 3.13 GRADING

A General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

B Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:

(i) Turf or Unpaved Areas: Plus or minus 1 inch (25 mm).

(ii) Walks: Plus or minus 1 inch (25 mm).

(iii) Pavements: Plus or minus 1/2 inch (13 mm).

C Grading inside Building Lines: Finish subgrade to a tolerance of \[1/2\text{ inch (13 mm)}\] when tested with a 10-foot (3-m) straightedge.

Section 3.14 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

A Place subbase course and base course on subgrades free of mud, frost, snow, or ice.

B On prepared subgrade, place subbase course and base course under pavements and walks as follows:

(i) Shape subbase course and base course to required crown elevations and cross-slope grades.

(ii) Place subbase course and base course that exceeds 6 inches (150 mm) in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches (150 mm) thick or less than 3 inches (75 mm) thick.

(iii) Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95% percent of maximum dry unit weight according to ASTM D698 [ASTM D1557].

Section 3.15 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

A Place drainage course on subgrades free of mud, frost, snow, or ice.

B On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:

(i) Place drainage course that exceeds 6 inches (150 mm) in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches (150 mm) thick or less than 3 inches (75 mm) thick.

(ii) Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D698.

Section 3.16 FIELD QUALITY CONTROL
A  Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.

B  When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

Section 3.17 PROTECTION

A  Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B  Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

C  Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

(i) Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

Section 3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A  Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner’s property.

END OF SECTION 312000
SECTION 321000 – BASE, BALLAST, & PAVING

Part 1. GENERAL

Section 1.01 SUMMARY

A Section Includes:

(i) Hot-Mix asphalt paving

Section 1.02 ACTION SUBMITTALS

A Product Data:

B Hot-mix asphalt designs

Section 1.03 INFORMATIONAL SUBMITTALS

A Material Certificates:

(i) Aggregates.

(ii) Asphalt binder.

(iii) Tack coat.

Section 1.04 QUALITY ASSURANCE

A Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements for asphalt paving work.

(i) Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

Part 2. PRODUCTS

Section 2.01 GENERAL

A Refer to Civil General Notes and general notes for materials required for this project.

Part 3. EXECUTION

Section 3.01 SURFACE PREPARATION

A Ensure that prepared subgrade is ready to receive paving. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces.

B Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd. (0.2 to 0.7 L/sq. m).

(i) Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
(ii) Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

Section 3.02 HOT-MIX ASPHALT PLACEMENT

A Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

(i) Spread mix at a minimum temperature of 250 deg F (121 deg C).

(ii) Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

B Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.

C Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

Section 3.03 JOINTS

A Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.

(i) Clean contact surfaces and apply tack coat to joints.

(ii) Offset longitudinal joints, in successive courses, a minimum of 6 inches (150 mm).

(iii) Offset transverse joints, in successive courses, a minimum of 24 inches (600 mm).

(iv) Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method in accordance with AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations.

Section 3.04 COMPACTION

A General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

(i) Complete compaction before mix temperature cools to 185 deg F (85 deg C).

B Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

D surfaces to remove roller marks while hot-mix asphalt is still warm.

E Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
Section 3.05 FIELD QUALITY CONTROL

A  Replace and compact hot-mix asphalt where core tests were taken.
B  Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

END OF SECTION 321000
SECTION 331000 – WATER UTILITIES

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.


C City of Coeur d’Alene Construction Standards, Standard Drawings and Specifications.

Section 1.02 DEFINITIONS

A Retain abbreviations that remain after this Section has been edited.

B EPDM: Ethylene propylene diene terpolymer rubber.

C PE: Polyethylene plastic.

D PVC: Polyvinyl chloride plastic.

E HDPE: High-density polyethylene.

Section 1.03 SUMMARY

A This Section includes water-distribution piping and specialties outside the building for the following:

   (i) Water services.

   (ii) Fire-service mains.

Section 1.04 SUBMITTALS

A Product Data: For the following:

   (i) Valves and accessories.

   (ii) Water meters and accessories.

   (iii) Backflow prevention devices and assemblies.

   (iv) Fire department connections.

B Wiring Diagrams: Power, signal, and control wiring.

C Field quality-control test reports.

D Operation and Maintenance Data: For the following:

   (i) Water meters.

   (ii) Valves.
(iii) Backflow prevention devices and assemblies.
(iv) Protective enclosures.

Section 1.05 QUALITY ASSURANCE

A Regulatory Requirements:

(i) Comply with requirements of the City of Coeur d'Alene Construction Standards. Include tapping of water mains and backflow prevention.

(ii) Comply with City of Coeur d'Alene Construction Standards for potable-water-service piping, including materials, installation, testing, and disinfection.

(iii) Comply with standards of the City of Coeur d'Alene for fire-suppression water-service piping, including materials, hose threads, installation, and testing.

B Piping materials shall bear label, stamp, or other markings of specified testing agency.

C Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.


E NFPA Compliance: Comply with NFPA 24 for materials, installations, tests, flushing, and valve and hydrant supervision for fire-service-main piping for fire suppression.

F NSF Compliance:

(i) Comply with NSF 14 for plastic potable-water-service piping.

(ii) Comply with NSF 61 for materials for water-service piping and specialties for domestic water.

Section 1.06 PROJECT CONDITIONS

A Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

(i) Notify Architect not less than two days in advance of proposed utility interruptions.

(ii) Do not proceed with utility interruptions without Architect's written permission.

Section 1.07 COORDINATION

A Coordinate with City of Coeur d'Alene Fire Department on any fire hydrants or fire services that are temporarily or permanently not in use.

Part 2. PRODUCTS

Section 2.01 MANUFACTURERS

A Products and manufacturers are limited to those allowed by the City of Coeur d'Alene.
(i) Available Products: Subject to compliance with City of Coeur d’Alene requirements, products that may be incorporated into the Work include, but are not limited to, the products specified in the City of Coeur d’Alene standard specifications.

(ii) Available Manufacturers: Subject to compliance with City of Coeur d’Alene requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified in the City of Coeur d’Alene standard specifications.

Section 2.02 PIPING MATERIALS

A Refer to Part 3 "Piping Applications" Article for applications of pipe, tube, fitting, and joining materials.

Section 2.03 PIPE AND FITTINGS

A Mechanical-Joint, Ductile-Iron Pipe: AWWA C151, with mechanical-joint, bell- and plain-spigot end unless grooved or flanged ends are indicated.

(i) Mechanical-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.

(ii) Glands, Gaskets, and Bolts: AWWA C111, ductile- or gray-iron glands, rubber gaskets, and steel bolts.

B Push-on-Joint, Ductile-Iron Pipe: AWWA C151, with push-on-joint, bell- and plain-spigot end unless grooved or flanged ends are indicated.

(i) Push-on-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.

(ii) Gaskets: AWWA C111, rubber.

C Soft Copper Tube: ASTM B 88, Type K, water tube, annealed temper.

(i) Copper Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint pressure type. Furnish only wrought-copper fittings if indicated (not approved for City side of meter service).

D PE, ASTM Pipe: ASTM D 2239, SIDR Numbers 5.3, 7, or 9; with PE compound number required to give pressure rating not less than 150 psig.

(i) Insert Fittings for PE Pipe: ASTM D 2609, made of PA, PP, or PVC with serrated, male insert ends matching inside of pipe. Include bands or crimp rings.

(ii) Molded PE Fittings: ASTM D 3350, PE resin, socket- or butt-fusion type, made to match PE pipe dimensions and class.

E PVC, Schedule 40 Pipe: ASTM D 1785.

(i) PVC, Schedule 40 Socket Fittings: ASTM D 2466 (not approved for City side of meter service).

F PVC, Schedule 80 Pipe: ASTM D 1785.

(i) PVC, Schedule 80 Socket Fittings: ASTM D 2467 (not approved for City side of meter service).

G PVC, AWWA Pipe: AWWA C900, Class 150, with bell end with gasket and spigot end.

(i) Comply with UL 1285 for fire-service mains if indicated.
(ii) PVC Fabricated Fittings: AWWA C900, Class 150, with bell-and-spigot or double-bell ends. Include elastomeric gasket in each bell.

(iii) PVC Molded Fittings: AWWA C907, Class 150, with bell-and-spigot or double-bell ends. Include elastomeric gasket in each bell.

Section 2.04 JOINING MATERIALS

a) Brazing Filler Metals: AWS A5.8, BCuP Series.

b) Soldering Flux: ASTM B 813, water-flushable type.

c) Solder Filler Metal: ASTM B 32, lead-free type with 0.20 percent maximum lead content (not approved for City side of meter service).

Section 2.05 VALVES

A AWWA, Cast-Iron, Gate Valves:

(i) Manufacturers and products as allowed by the City of Coeur d’Alene:

(ii) Nonrising-Stem, Resilient-Seated Gate Valves: AWWA C509, gray- or ductile-iron body and bonnet; with bronze or gray- or ductile-iron gate, resilient seats, bronze stem, and stem nut.


b) End Connections: Mechanical joint.

c) Interior Coating: Complying with AWWA C550.

B UL/FM, Cast-Iron Gate Valves:

(i) Manufacturers and products as allowed by the City of Coeur d’Alene:

(ii) UL/FM, Nonrising-Stem Gate Valves: UL 262, FM-approved iron body and bonnet with flange for indicator post, bronze seating material, and inside screw.


b) End Connections: Flanged.

Section 2.06 GATE VALVE ACCESSORIES AND SPECIALTIES

A Tapping-Sleeve Assemblies: Comply with MSS SP-60. Include sleeve and valve compatible with drilling machine.

(i) Manufacturers and products as allowed by the City of Coeur d’Alene:

(ii) Tapping Sleeve: Stainless-steel, two-piece bolted sleeve with flanged outlet for new branch connection. Include sleeve matching size and type of pipe material being tapped and with recessed flange for branch valve.

(iii) Valve: AWWA, cast-iron, nonrising-stem, resilient-seated gate valve with one raised face flange mating tapping-sleeve flange.
B Valve Boxes: Comply with AWWA M44 for Tyler 6855 “Heavy” series cast-iron valve boxes. Include top section, adjustable extension of length required for depth of burial of valve, plug with lettering “WATER,” bottom section with base of size to fit over valve, and approximately 5-inch diameter barrel.

(i) Operating Wrenches: Steel tee-handle with one pointed end, stem of length to operate deepest buried valve, and socket matching valve operating nut.

C Vertical-Type Indicator Posts: UL 789, FM-approved, cast-iron body with operating wrench, extension rod, and Adjustable cast-iron barrel of length required for depth of burial of valve.

Section 2.07 CORPORATION VALVES AND CURB VALVES

A Manufacturers and projects as allowed by the City of Coeur d’Alene:

B Service-Saddle Assemblies: Comply with AWWA C800. Include saddle and valve compatible with tapping machine.

(i) Service Saddle: Romac, Ford, or Dresser epoxy coated iron body with double stainless steel straps, threaded outlet for corporation valve.

(ii) Corporation Valve: Bronze body and ground-key plug, with AWWA C800, threaded inlet and outlet matching service piping material.

C Curb Valves: Comply with AWWA C800. Include bronze body, ground-key plug or ball, and wide tee head, with inlet and outlet matching service piping material.

D Service Boxes for Curb Valves: Similar to AWWA M44 requirements for cast-iron valve boxes. Include cast-iron telescoping top section of length required for depth of burial of valve, plug with lettering “WATER,” bottom section with base of size to fit over curb valve, and approximately 3-inch diameter barrel.

(i) Shutoff Rods: Steel, tee-handle with one pointed end, stem of length to operate deepest buried valve, and slotted end matching curb valve.

Section 2.08 BACKFLOW-PREVENTION DEVICES

A Manufacturers and products as allowed by the City of Coeur d’Alene per current USC approval:

B General: ASSE standard, backflow prevention devices.

(i) Working Pressure: 150 psig minimum, unless otherwise indicated.

(ii) NPS 2 and Smaller: Bronze body with threaded ends.

(iii) NPS 2-1/2 and Larger: Bronze, cast-iron, steel, or stainless-steel body with flanged ends.

a) Interior Lining: AWWA C550 or FDA-approved, epoxy coating for backflow preventers having cast-iron or steel body.

(iv) Interior Components: Corrosion-resistant materials.

(v) Exterior Finish: Polished chrome plate if used in chrome-plated piping system.

C Pipe-Applied, Atmospheric-Type Vacuum Breakers: ASSE 1001, with floating disc and atmospheric vent.

D Reduced-Pressure-Principle Backflow Prevention Devices per the City of Coeur d’Alene: Suitable for continuous pressure application. Include outside screw and yoke gate valves on inlet and outlet, and strainer on inlet; test
cocks; and pressure-differential relief valve with ASME A112.1.2, air-gap fitting located between two positive-seating check valves.

(i) Maximum Pressure Loss: 12 psig through middle 1/3 of flow range.

E Double-Check-Valve Backflow Prevention Assemblies per the City of Coeur d'Alene: Suitable for continuous pressure application. Include outside screw and yoke gate valves on inlet and outlet, and strainer on inlet; test cocks; and two positive-seating check valves.

(i) Maximum Pressure Loss: 5 psig through middle 1/3 of flow range.

F Double-Check-Valve Backflow Prevention Assemblies per the City of Coeur d'Alene: UL 312, FM approved; with two UL 312, FM-approved, iron-body, 175-psig working-pressure, flanged-end check valves and two UL 262, FM-approved, iron-body, outside screw and yoke, flanged, 175-psig working-pressure gate valves.

(i) Maximum Pressure Loss: 5 psig through middle 1/3 of flow range.

G Antisiphon-Pressure-Type Vacuum Breakers per the City of Coeur d'Alene: ASSE 1020, suitable for continuous pressure application. Include shutoff valves, spring-loaded check valve, spring-loaded floating disc, test cocks, and atmospheric vent.

(i) Maximum Pressure Loss: 5 psig through middle 1/3 of flow range.

Section 2.09 FREESTANDING FIRE HYDRANTS

A Per City of Coeur d'Alene requirements.

Part 3. EXECUTION

Section 3.01 SURFACE PREPARATION

A Ensure that prepared subgrade is ready to receive paving. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces.

B Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd. (0.2 to 0.7 L/sq. m).

(i) Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.

(ii) Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

Section 3.02 HOT-MIX ASPHALT PLACEMENT

A Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

(i) Spread mix at a minimum temperature of 250 deg F (121 deg C).

(ii) Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

B Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.
C Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

Section 3.03 JOINTS

A Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.

(i) Clean contact surfaces and apply tack coat to joints.

(ii) Offset longitudinal joints, in successive courses, a minimum of 6 inches (150 mm).

(iii) Offset transverse joints, in successive courses, a minimum of 24 inches (600 mm).

(iv) Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method in accordance with AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations.

Section 3.04 COMPACTION

A General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

(i) Complete compaction before mix temperature cools to 185 deg F (85 deg C).

B Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

D surfaces to remove roller marks while hot-mix asphalt is still warm.

E Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.

F Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

G Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

Section 3.05 FIELD QUALITY CONTROL

A Replace and compact hot-mix asphalt where core tests were taken.

B Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

END OF SECTION 331000
SECTION 333000 – SANITARY SEWERAGE UTILITIES

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.


C City of Coeur d’Alene Standard Drawings and Specifications.

Section 1.02 SUMMARY

A This Section includes sanitary sewerage outside the building.

B Related Sections include the following:

(i) Division 31 Section "Erosion and Sedimentation Control".

(ii) Division 31 Section "Earth Moving" for trench excavation, backfill, bedding.

(iii) Division 32 Section “Asphalt Paving”.

Section 1.03 DEFINITIONS

A PVC: Polyvinyl chloride plastic.

Section 1.04 PERFORMANCE REQUIREMENTS

A Gravity-Flow, Nonpressure-Piping Pressure Ratings: At least equal to system test pressure.

Section 1.05 SUBMITTALS

A Product Data: For the following:

(i) Pipe & Fittings.

(ii) Pipe Gaskets.

(iii) Manholes.

(iv) Manhole Gaskets.

(v) Grade Rings.

(vi) Steps/Handholds.

(vii) Manhole Adaptors.

(viii) Rings & Covers.
(ix) Cleanouts.

(x) Tracer Tape.

(xi) Oil/Water Separator

B Field Test Reports: Indicate and interpret test results for compliance with performance requirements.

Section 1.06 DELIVERY, STORAGE, AND HANDLING

A Do not store plastic structures, pipe, and fittings in direct sunlight.

B Protect pipe, fittings, and seals from dirt and damage.

C Handle precast concrete manholes and other structures according to manufacturer's written rigging instructions.

Section 1.07 PROJECT CONDITIONS

A Site Information: Perform site survey, research public utility records, and verify existing utility locations.

B Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

(i) Notify Architect not less than two business days in advance of proposed utility interruptions.

(ii) Do not proceed with utility interruptions without Architect's written permission.

Part 2. PRODUCTS

Section 2.01 PIPING MATERIALS

A Refer to Part 3 "Piping Applications" Article for applications of pipe and fitting materials.

Section 2.02 PIPES AND FITTINGS

A PVC Sewer Pipe and Fittings: According to the following:

(i) PVC Sewer Pipe and Fittings, NPS 15 and Smaller: ASTM D 3034, SDR 35, for gasketed joints.

   a) Gaskets: ASTM F 477, elastomeric seals.

Section 2.03 MANHOLES

A Normal-Traffic Precast Concrete Manholes: ASSHTO M 199, precast, reinforced concrete, of depth indicated, with provision for rubber gasketed joints.

(i) Gaskets: AASHTO M 198, rubber.

(ii) Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match 24-inch-diameter frame and cover.

(iii) Steps: ASTM C 478, individual step.

(iv) Manhole Adaptors: Kor-N-Seal manufactured by NPC, Inc. or an approved equal.
B Manhole Rings: AASHTO 105, Grade 30B, gray iron.

C Manhole Covers: ASTM A 536, Grade 80-55-06, ductile-iron designed for heavy-duty service.

Section 2.04 CONCRETE

A Portland Cement Design Mix: 4000 psi minimum, with 0.45 maximum water-cementitious materials ratio.


(ii) Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed steel.

B Structure Channels and Benches: Factory or field formed from concrete. Portland cement design mix, 3000 psi minimum, with 0.45 maximum water-cementitious materials ratio. Include channels and benches in manholes.

(i) Channels: Concrete invert, formed to same width as connected piping, with height of vertical sides to three-fourths of pipe diameter. Form curved channels with smooth, uniform radius and slope.

a) Invert Slope: 0.2’ minimum drop across, 1 percent through manhole.

(ii) Benches: Concrete, sloped to drain into channel.

a) Slope: 4 percent.

C Ballast and Pipe Supports: Portland cement design mix, 3000 psi minimum, with 0.58 maximum water-cementitious materials ratio.


(ii) Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed steel.

Section 2.05 CLEANOUTS

A PVC Cleanouts: PVC body with PVC threaded plug. Include PVC sewer pipe fitting and riser to cleanout of same material as sewer piping.

Section 2.06 TRACER TAPE

A Tracer tape shall consist of 0.35 mils. Thick solid foil core encased in a protective plastic jacket that is resistant to alkalis, acids and other destructive elements found in the soil. The laminated bond shall be strong enough that the layers cannot be separated by hand. The tracer tape shall contain sufficient metal mass to provide detectability at depths up to three (3) feet, with most inexpensive radio type metal locators. The tracer tape shall be green in color and shall be marked with a continuous warning message every 16” to 36”.

Part 3. EXECUTION

Section 3.01 EARTHWORK

A Excavating, trenching, and backfilling are specified in Division 31 Section "Earth Moving".

Section 3.02 IDENTIFICATION

A Tracer tape shall be installed to a maximum depth of three feet below the finished surface directly above all gravity sanitary sewer pipe eight inches in diameter or larger and all force main sewer pipe.
Section 3.03 PIPING APPLICATIONS

A General: Include watertight joints.

B Gravity-Flow Piping: Use the following:
   (i) PVC sewer pipe and fittings, gaskets and gasketed joints.

Section 3.04 INSTALLATION

A General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground sanitary sewerage piping. Location and arrangement of piping layout take design considerations into account. Install piping as indicated, to extent practical.

B Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for using lubricants, cements, and other installation requirements. Maintain swab or drag in line, and pull past each joint as it is completed.

C Use manholes for changes in direction, unless fittings are indicated. Use fittings for branch connections, unless direct tap into existing sewer is indicated.

D Use proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.

E Install gravity-flow piping and connect to building's sanitary drains, of sizes and in locations indicated. Terminate piping as indicated.
   (i) Install piping pitched down in direction of flow, at minimum slope of 0.6 percent, unless otherwise indicated.
   (ii) Install piping with 36-inch minimum cover.

F Connections to existing Manholes. Immediately following placement and connection of a new pipe to an existing manhole, the pipe shall be plugged and remain plugged, except during testing, until the new line is accepted. No additional pipe shall be connected until final set of the grouted connection has occurred. The outlet of the existing manhole shall be cleaned at the conclusion of the work.

Section 3.05 PIPE JOINT CONSTRUCTION AND INSTALLATION

A General: Join and install pipe and fittings according to installations indicated.

B PVC Sewer Pipe and Fittings: As follows:
   (i) Join pipe and gasketed fittings with gaskets according to ASTM D 2321 and manufacturer's written instructions.

C System Piping Joints: Make joints using system manufacturer's couplings, unless otherwise indicated.

D Join piping made of different materials or dimensions with couplings made for this application. Use couplings that are compatible with and that fit both systems' materials and dimensions.

Section 3.06 MANHOLE INSTALLATION

A General: Install manholes, complete with appurtenances and accessories indicated.

B Form continuous concrete channels and benches between inlets and outlet.
C Set tops of frames and covers flush with finished surface of manholes that occur in pavements. Set tops 3 inches above finished surface elsewhere, unless otherwise indicated.

D Install precast concrete manhole sections with gaskets according to ASTM C 891.

Section 3.07 CLEANOUT INSTALLATION

A Install cleanouts and riser extension from sewer pipe to cleanout at grade. Install piping so cleanouts open in direction of flow in sewer pipe.

B Set with tops 1 inch above surrounding grade.

C Set cleanout frames and covers in concrete pavement with tops flush with pavement surface.

Section 3.08 FIELD QUALITY CONTROL

A Clear interior of piping and structures of dirt and superfluous material as work progresses. Maintain swab or drag in piping, and pull past each joint as it is completed.

(i) Place plug in end of incomplete piping at end of day and when work stops.

(ii) Flush piping between manholes and other structures to remove collected debris, if required by authorities having jurisdiction.

B Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.

(i) Submit separate reports for each system inspection.

(ii) Defects requiring correction include the following:

a) Alignment: Less than full diameter of inside of pipe is visible between structures.

b) Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.

c) Crushed, broken, cracked, or otherwise damaged piping.

d) Infiltration: Water leakage into piping.

e) Exfiltration: Water leakage from or around piping.

(iii) Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.

(iv) Re-inspect and repeat procedure until results are satisfactory.

C Test new piping systems, and parts of existing systems that have been altered, extended, or repaired, for leaks and defects.

(i) Do not enclose, cover, or put into service before inspection and approval.

(ii) Test completed piping systems according to authorities having jurisdiction.

(iii) Schedule tests and inspections by authorities having jurisdiction with at least 24 hours advance notice.
Submit separate reports for each test.

a) Manhole Exfiltration Test. Manhole outlets shall be plugged and the manhole filled with water at least one hour prior to testing and shall be tested at least one hour maintaining the head by measured additions of water. The sum of these additions shall be the leakage for the test period. Leakage shall not exceed 0.2 GPH per foot of the head above the invert. Contractor shall, at his own expense, correct any excess leakage.

b) Low Pressure Air Test. All gravity sewer testing shall be by the low pressure air method in accordance with these specifications and the test procedure as outlined below. The low pressure air test method shall be conducted according to the following procedures:

1) Add air slowly to the portion of the pipe installation under test until the internal air pressure is raised to 4.0 psig.

2) After an internal pressure of 4.0 psig is obtained, allow at least two minutes for air temperature to stabilize, adding only the amount of air required to maintain pressure. After the two minute period, disconnect the air supply.

3) When the pressure decreases to 3.5 psig, start stop watch. Determine the time in seconds required for the internal air pressure to decrease to 2.5 psig. Compare this actual time interval to the “Time Required by Specification” derived in the following steps.

4) List the diameter (d) and respective length (L) of all portions of pipe under test.

5) Compute K and C for each diameter (d) and respective length (L) as follows; K = 0.011*d^2*L; C = 0.0003882*d*L. Sum all values of K and all values of C for pipe under the test.

6) If the total of all C values is less than one, the total of all K values is the “Time Required by Specification.”

7) If the total of all C values is greater than one, divide the total of all K values by the total of all C values. This is the “Time Required by Specification.”

8) The low pressure air test method as specified shall be performed and paid for by the Contractor. The Contractor shall, at his own expense, correct any pipe installation not passing this test.

c) Deflection Test. All sewer main pipe shall be required to pass this test. The Contractor shall, at his own expense, correct any pipe installation not passing this test.

(v) Leaks and loss in test pressure constitute defects that must be repaired.

(vi) Replace leaking piping using new materials, and repeat testing until leakage is within allowances specified.

END OF SECTION 333000
SECTION 334000 – STORM WATER DRAINAGE UTILITIES

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.


C City of Coeur d’Alene Standard Drawings and Specifications.

Section 1.02 SUMMARY

A This Section includes storm drainage outside the building.

Section 1.03 PERFORMANCE REQUIREMENTS

A Gravity-Flow, Nonpressure-Piping Pressure Ratings: At least equal to system test pressure.

Section 1.04 SUBMITTALS

A Product Data: For cleanouts and drains indicated.

B Shop Drawings: For precast concrete manholes and other structures, including frames, covers, and grates.

C Field quality-control test reports.

Section 1.05 PROJECT CONDITIONS

A Site Information: Perform site survey, research public utility records, and verify existing utility locations.

Part 2. PRODUCTS

Section 2.01 MANUFACTURERS

A Products and manufacturers are limited to those allowed by the City of Coeur d’Alene.

(i) Available Products: Subject to compliance with City of Coeur d’Alene requirements, products that may be incorporated into the Work include, but are not limited to, the products specified in the City of Coeur d’Alene standard specifications.

(ii) Available Manufacturers: Subject to compliance with City of Coeur d’Alene requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified in the City of Coeur d’Alene standard specifications.

Section 2.02 PIPING MATERIALS

A Refer to Part 3 “Piping Applications” Article for applications of pipe and fitting materials.

Section 2.03 PIPES AND FITTINGS
A Ductile-Iron Culvert Pipe: ASTM A 716, for push-on joints.

(i) Standard-Pattern, Ductile-Iron Fittings: AWWA C110, ductile or gray iron, for push-on joints.

(ii) Gaskets: AWWA C111, rubber.

B PVC Sewer Pipe and Fittings: According to the following:

(i) PVC Sewer Pipe and Fittings, NPS 15 and Smaller: ASTM D 3034, SDR 35, for solvent-cemented or gasketed joints.
   a) Gaskets: ASTM F 477, elastomeric seals.

(ii) PVC Sewer Pipe and Fittings, NPS 18 and Larger: ASTM F 679, T-1 wall thickness, bell and spigot for gasketed joints.
   a) Gaskets: ASTM F 477, elastomeric seals.

Section 2.04 MANHOLES

A Normal-Traffic Precast Concrete Manholes: ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for rubber gasketed joints.

(i) Diameter: 48 inches minimum, unless otherwise indicated.

(ii) Ballast: Increase thickness of precast concrete sections or add concrete to base section, as required to prevent flotation.

(iii) Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and having separate base slab or base section with integral floor.

(iv) Riser Sections: 4-inch minimum thickness, and lengths to provide depth indicated.

(v) Top Section: Eccentric-cone type, unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.

(vi) Gaskets: ASTM C 443, rubber.

(vii) Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match 24-inch diameter frame and cover.

(viii) Steps: Fiberglass, individual steps or ladder. Include width that allows worker to place both feet on one step and is designed to prevent lateral slippage off step. Cast or anchor into base, riser, and top section sidewalls with steps at 12- to 16-inch intervals. Omit steps for manholes less than 60 inches deep.

(ix) Steps: ASTM C 478, individual steps or ladder. Omit steps for manholes less than 60 inches deep.

(x) Pipe Connectors: ASTM C 923, resilient, of size required, for each pipe connecting to base section.

B Manhole Frames and Covers: ASTM A 536, Grade 60-40-18, ductile-iron castings designed for heavy-duty service. Include 24-inch ID by 7- to 9-inch riser with 4-inch minimum width flange, and 26-inch diameter cover. Include indented top design with lettering "STORM SEWER" cast into cover.

Section 2.05 CATCH BASINS
A Normal-Traffic, Precast Concrete Catch Basins: ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for rubber gasketed joints.

(i) Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and having separate base slab or base section with integral floor.

(ii) Riser Sections: 4-inch minimum thickness, 48-inch diameter, and lengths to provide depth indicated.

(iii) Top Section: Eccentric-cone type, unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.

(iv) Gaskets: ASTM C 443, rubber.

(v) Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match 24-inch diameter frame and grate.

(vi) Steps: Fiberglass, individual steps or ladder. Include width that allows worker to place both feet on one step and is designed to prevent lateral slippage off step. Cast steps or anchor ladder into base, riser, and top section sidewalls at 12- to 16-inch intervals. Omit steps for catch basins less than 60 inches deep.

(vii) Steps: ASTM C 478, individual steps or ladder. Omit steps for catch basins less than 60 inches deep.

(viii) Pipe Connectors: ASTM C 923, resilient, of size required, for each pipe connecting to base section.

B Frames and Grates: ASTM A 536, Grade 60-40-18, ductile iron designed for heavy-duty service. Include flat grate with small square or short-slotted drainage openings.

(i) Size: 24 by 24 inches minimum, unless otherwise indicated.

(ii) Grate Free Area: Approximately 50 percent, unless otherwise indicated.

C Retain paragraph and subparagraphs above or paragraph and subparagraph below.

D Retain below for round, manhole-type structures.

E Frames and Grates: ASTM A 536, Grade 60-40-18, ductile iron designed for heavy-duty service. Include 24-inch ID by 7- to 9-inch riser with 4-inch minimum width flange, and 26-inch diameter flat grate with small square or short-slotted drainage openings.

(i) Grate Free Area: Approximately 50 percent, unless otherwise indicated.

Section 2.06 DRYWELLS

A Per City of Coeur d’Alene Requirements noted on the drawings.

Section 2.07 STORMWATER INLETS

A Curb Inlets: Made with vertical curb opening, of materials and dimensions according to utility standards.

Section 2.08 CONCRETE

A General: Cast-in-place concrete according to ACI 318, ACI 350R.

(i) Cement: ASTM C 150, Type II.

(ii) Fine Aggregate: ASTM C 33, sand.
(iii) Coarse Aggregate: ASTM C 33, crushed gravel.

(iv) Water: Potable.

B Portland Cement Design Mix: 3000 psi minimum, with 0.45 maximum water-cementitious ratio.


(ii) Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed steel.

C Edit below to suit Project. Delete if not required.

D Ballast and Pipe Supports: Portland cement design mix, 3000 psi minimum, with 0.58 maximum water-cementitious ratio.


(ii) Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed steel.

Section 2.09 PROTECTIVE COATINGS

A Description: 1- or 2-coat, coal-tar epoxy; 15-mil minimum thickness, unless otherwise indicated; factory or field applied to the following surfaces:

(i) Concrete Manholes: On exterior and interior surfaces.

(ii) Manhole Frames and Covers: On entire surfaces.

(iii) Catch Basins: On exterior and interior surfaces.


(v) Storm water Inlets: On exterior and interior surfaces.

(vi) Storm water Inlet Frames and Grates: On entire surfaces.

Section 2.10 CLEANOUTS

A Gray-Iron Cleanouts: ASME A112.36.2M, round, gray-iron housing with clamping device and round, secured, scoriated, gray-iron cover. Include gray-iron ferrule with inside calk or spigot connection and countersunk, tapered-thread, brass closure plug. Use units with top-loading classifications according to the following applications:

(i) Light Duty: In earth or grass foot-traffic areas.

(ii) Medium Duty: In paved foot-traffic areas.

(iii) Heavy Duty: In vehicle-traffic service areas.

(iv) Extra-Heavy Duty: In roads.

(v) Sewer Pipe Fitting and Riser to Cleanout: ASTM A 74, Service class, cast-iron soil pipe and fittings.

B PVC Cleanouts: PVC body with PVC threaded plug. Include PVC sewer pipe fitting and riser to cleanout of same material as sewer piping.
Section 2.11 DRAINS

A  See Mechanical specifications for interior piping and drainage.

Part 3.  EXECUTION

Section 3.01 EARTHWORK

A  Excavating, trenching, backfilling, and identification materials and their installation are specified in Division 31 Section "Earth Moving." Arrange for installing green warning tapes directly over piping and at outside edges of underground structures.

(i) Use warning tape or detectable warning tape over ferrous piping.

(ii) Use detectable warning tape over nonferrous piping and over edges of underground structures.

Section 3.02 PIPING APPLICATIONS

A  Piping Applications: Include watertight or soil-tight joints.

(i) NPS 3: Hub-and-spigot, Service class, cast-iron soil pipe and fittings; gaskets; and gasketed joints.

(ii) Select from three subparagraphs below.

(iii) NPS 4 to NPS 6: Hub-and-spigot, Service class, cast-iron soil pipe and fittings; gaskets; and gasketed joints.

(iv) NPS 4 and NPS 6: PVC sewer pipe and fittings, gaskets, and gasketed joints.

(v) Select from four subparagraphs below.

(vi) NPS 8 to NPS 15: Ductile-iron sewer pipe; standard-pattern, ductile-iron fittings; gaskets; and gasketed joints in NPS 8 to NPS 12. Use ductile-iron culvert pipe; standard-pattern, ductile-iron fittings; gaskets; and gasketed joints in NPS 14 and NPS 16.

(vii) NPS 8 to NPS 15: PVC sewer pipe and fittings, gaskets, and gasketed joints.

(viii) Select from three subparagraphs below.

(ix) NPS 18 to NPS 36: PVC sewer pipe and fittings, gaskets, and gasketed joints.

(x) NPS 4 to NPS 15: HDPE pipe.

Section 3.03 SPECIAL PIPE COUPLINGS

A  Sleeve-Type Pipe Couplings: Use where required to join piping and no other appropriate method is specified. Do not use instead of specified joining methods.

Section 3.04 INSTALLATION

A  General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take design considerations into account. Install piping as indicated, to extent practical.

B  Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to
manufacturer's written instructions for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line, and pull past each joint as it is completed.

C Use manholes for changes in direction, unless fittings are indicated. Use fittings for branch connections, unless direct tap into existing sewer is indicated.

D Use proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.

E Install gravity-flow piping and connect to building's storm drains, of sizes and in locations indicated. Terminate piping as indicated.

(i) Install piping pitched down in direction of flow, at minimum slope of 0.5 percent, unless otherwise indicated.

(ii) Install piping with 24-inch minimum cover.

F Extend storm drainage piping and connect to building's storm drains, of sizes and in locations indicated. Terminate piping as indicated.

Section 3.05 PIPE JOINT CONSTRUCTION AND INSTALLATION

A Join and install pipe and fittings according to installations indicated.


C Ductile-Iron Pipe and Gray- or Ductile-Iron Fittings: According to AWWA C600.

D PVC Sewer Pipe and Fittings: As follows:

(i) Join pipe and gasketed fittings with gaskets according to ASTM D 2321.

(ii) Install according to ASTM D 2321.

E Join piping made of different materials or dimensions with couplings made for this application. Use couplings that are compatible with and that fit both systems' materials and dimensions.

Section 3.06 MANHOLE INSTALLATION

a) Install complete with appurtenances and accessories indicated.

b) Set tops of frames and covers flush with finished surface of manholes that occur in pavements. Set tops 3 inches above finished surface elsewhere, unless otherwise indicated.

c) Install precast concrete manhole sections with gaskets according to ASTM C 891.

Section 3.07 CATCH-BASIN INSTALLATION

A Set frames and grates to elevations indicated.

Section 3.08 DRYWELL INSTALLATION

A Set frame and grate to elevations indicated.

B Per City of Coeur d'Alene requirements noted on the drawings.
Section 3.09 CONCRETE PLACEMENT

A Place cast-in-place concrete according to ACI 318 and ACI 350R.

Section 3.10 DRAINAGE SYSTEM INSTALLATION

A Install cleanouts and riser extension from storm drainage pipe to cleanout at grade. Use cast-iron soil pipe fittings in storm drainage pipes at branches for cleanouts and cast-iron soil pipe for riser extensions to cleanouts. Install piping so cleanouts open in direction of flow in storm drainage pipe.

(i) Set cleanout frames and covers in earth in cast-in-place concrete block, 18 by 18 by 12 inches deep. Set with tops 1 inch above surrounding grade.

(ii) Set cleanout frames and covers in concrete pavement with tops flush with pavement surface.

B Install drains in locations indicated.

C Make connections to existing piping and underground structures so finished Work complies as nearly as practical with requirements specified for new Work.

D Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye fitting, plus 6-inch overlap, with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.

E Make branch connections from side into existing piping, NPS 4 to NPS 20. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.

F Make branch connections from side into existing piping, NPS 21 or larger, or to underground structures by cutting opening into existing unit large enough to allow 3 inches of concrete to be packed around entering connection. Cut end of connection pipe passing through pipe or structure wall to conform to shape of and be flush with inside wall, unless otherwise indicated. On outside of pipe or structure wall, encase entering connection in 6 inches of concrete for minimum length of 12 inches to provide additional support of collar from connection to undisturbed ground.

(i) Use concrete that will attain minimum 28-day compressive strength of 3000 psi, unless otherwise indicated.

(ii) Use epoxy-bonding compound as interface between new and existing concrete and piping materials.

Section 3.11 FIELD QUALITY CONTROL

A Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.

(i) Defects requiring correction include the following:

a) Alignment: Less than full diameter of inside of pipe is visible between structures.

b) Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter. Crushed, broken, cracked, or otherwise damaged piping.

c) Infiltration: Water leakage into piping.

d) Exfiltration: Water leakage from or around piping.
(ii) Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.

(iii) Reinspect and repeat procedure until results are satisfactory.

B Test new piping systems according to authorities having jurisdiction.

Section 3.12 PROTECTION AND CLEANING

A Protect existing piping and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.

B Clear interior of piping and structures of dirt and superfluous material as work progresses. Maintain swab or drag in piping, and pull past each joint as it is completed.

(i) Place plug in end of incomplete piping at end of day and when work stops.

(ii) Flush piping between manholes and other structures to remove collected debris, if required by authorities having jurisdiction.

END OF SECTION 334000
SECTION 335000 – FUEL DISTRIBUTION UTILITIES

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Retain or delete this article in all Sections of Project Manual.
B Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
D City of Coeur d’Alene Standard Drawings and Specifications.

Section 1.02 SUMMARY:

A Piping.

Section 1.03 DEFINITIONS:

A Gas Main: Utility’s natural gas piping.
B Gas Distribution: Piping from gas main to individual service-meter assemblies.
C Service-Meter Assembly: Piping, valves, service regulator, and specialties.
D Point of Delivery: Piping outlet from service-meter assembly.
E Natural Gas Piping: Piping that conveys natural gas from point of delivery to natural gas utilization devices inside the building.
F PE: Polyethylene plastic.

Section 1.04 PERFORMANCE REQUIREMENTS:

A Minimum Working-Pressure Ratings:
   (i) Piping and Valves: 100 psig (690 kPa) minimum, unless otherwise indicated.
B Codes and Standards:
   (i) Meet codes and regulatory standards of gas utility purveyor, and all other applicable regulatory standards.

Section 1.05 SUBMITTALS:

A Product Data: For the following:
   (i) PE pipe and fittings.
   (ii) Welding certificates.
   (iii) Field quality-control test reports.

Section 1.06 QUALITY ASSURANCE:

A Product Options: Drawings indicate size, profiles, and dimensional requirements of earthquake valves and are based on the specific system indicated. Refer to Division 1 Section “Product Requirements.”
B Welding: Qualify processes and operators according to ASME Boiler and Pressure Vessel Code: Section IX.
C Comply with ANSI Z223.1 or NFPA 54 for materials, installation, testing, inspection, and purging.

Section 1.07 DELIVERY, STORAGE, AND HANDLING:

601 E. Front Ave. Ste. 201 Coeur d’Alene, Idaho 83814 Ph: 208.664.1773 Email: marcn@millerstauffer.com
Section 1.08 PROJECT CONDITIONS:

A Handling Flammable Liquids: Remove and legally dispose of liquids from drips in existing gas piping. Handle liquids to avoid spillage and ignition. Notify gas supplier. Do not leave flammable liquids on premises overnight.

B Store PE pipes and valves protected from direct sunlight.

Section 1.09 COORDINATION:

A Coordinate natural gas distribution with other utility Work.

Part 2. PRODUCTS

Section 2.01 MANUFACTURERS:

A Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified or otherwise accepted by utility purveyor.

Section 2.02 PIPES AND FITTINGS:

A Steel Pipe: ASTM A 53/A 53M, Type E or S, Grade B; Schedule 40, black.


(ii) Steel Fittings: ASME B16.9, wrought-steel butt-welding type; and ASME B16.11, forged steel.

(iii) Steel Flanges and Flanged Fittings: ASME B16.5.

(iv) Unions: ASME B16.39, Class 150, black malleable iron; female pattern; brass-to-iron seat; ground joint.

B PE Pipe: ASTM D 2513, SDR 11.

(i) PE Fittings: ASTM D 2683, socket type or ASTM D 3261, butt type with dimensions matching ASTM D 2513, SDR 11, PE pipe.

C Transition Fittings: Manufactured pipe fitting with one PE pipe end for heat-fusion connection to PE pipe and with one ASTM A 53/A 53M, Schedule 40, steel pipe end for threaded connection to steel pipe.

D Service-Line Risers: Manufactured PE pipe fitting with PE pipe inlet for heat-fusion connection to underground PE pipe; PE pipe riser section with protective-coated, anodeless, steel casing and threaded outlet for threaded connection to aboveground steel piping.

Section 2.03 JOINING MATERIALS:

A Components, Tapes, Gaskets, and Bolts and Nuts: Suitable for natural gas and as recommended by piping manufacturer.

Section 2.04 SERVICE METER:
Section 2.05 PREPARATION:

A. Close equipment shutoff valves before turning off gas to premises or piping section.
B. Inspect natural gas piping according to fuel gas code to determine that natural gas utilization devices are turned off in piping section affected.
C. Comply with fuel gas code requirements for prevention of accidental ignition.

Section 2.06 PIPING APPLICATIONS:

A. Flanges, unions, and transition and special fittings with pressure ratings same as or higher than system pressure rating may be used, unless otherwise indicated.
B. Above-ground Piping:
   (i) NPS 2 (DN 50) and Smaller: Steel pipe, butt-welding-type fittings, and welded joints. Joints for connection to threaded service regulators, service meters, and valves may be threaded.
   (ii) NPS 2 (DN 50) and Smaller: Steel pipe, malleable-iron fittings, and threaded joints.
   (iii) NPS 2-1/2 (DN 65) and Larger: Steel pipe, butt-welding-type fittings, and welded joints. Joints for connection to service regulators, service meters, and valves with flanged connections may be flanged. Joints for connection to service regulators, service meters, and valves with threaded connections NPS 2-1/2 to NPS 4 (DN 65 to DN 100) may be threaded.
C. Underground Piping: PE pipe, PE fittings, and heat-fusion joints.
D. Protective Conduit for Underground Piping: Steel pipe and threaded- or welding-type fittings.
F. PE-to-Steel Piping Connections: Transition fitting.

Section 2.07 PIPING INSTALLATION:

A. Install underground, natural gas distribution piping buried at least 36 inches below finished grade, unless indicated otherwise.
B. Install underground, PE, natural gas distribution piping according to ASTM D 2774. Provide sand bedding meeting Avista Utility requirements.

Section 2.08 JOINT CONSTRUCTION:

A. CONNECTIONS:
   (i) Drawings indicate general arrangement of piping, fittings, and specialties.
   (ii) Connect gas distribution piping to natural gas source and extend to service-meter assemblies and points indicated. Connect to building's natural gas piping if it is installed; otherwise, terminate piping with caps, plugs, or flanges, as required for piping material.
   (iii) Install unions, in piping NPS 2 (DN 50) and smaller, adjacent to each valve and at final connection to each piece of equipment having threaded pipe connection.
   (iv) Install flanges, in piping NPS 2-1/2 (DN 65) and larger, adjacent to flanged valves and at final connection to each piece of equipment having flanged pipe connection.
   (v) Install aboveground, natural gas distribution piping upstream from equipment shutoff valves, electrically continuous, and bonded to grounding electrode according to NFPA 70.
(vi) Do not use natural gas distribution piping as grounding electrode.

Section 2.09 LABELING AND IDENTIFYING:

A Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplates and signs on or near each service regulator, service meter, and earthquake valve.

B Warning Tapes: Arrange for installation of continuous, underground, detectable warning tape over natural gas distribution piping during backfilling of trenches for piping.

Section 2.10 PAINTING:

A Paint exposed metal piping, valves, service regulators, service meters and meter bars, earthquake valves, and piping specialties except units with factory-applied paint or protective coating.

B Damage and Touchup: Repair marred and damaged factory-applied finishes with materials and by procedures to match original factory finish.

Section 2.11 FIELD QUALITY CONTROL:

A Test, inspect, and purge natural gas distribution according to requirements of fuel gas code and the utility purveyor.

B Repair leaks and defective valves and specialties and retest system until no leaks exist.

C Report results in writing.

D Verify correct pressure settings for service regulators.

Part 3. EXECUTION

Section 3.01 GENERAL

A Install the natural gas utilities per standard details supplied by the local utility purveyor.

B Coordinate construction with contractor, construction manager, local utility purveyor, owner, and architect.

C Do not commence construction until an on-site meeting can be held with the contractor, owner, and construction manager.

D Follow contract documents for routing of utilities. If conflict arises or local utility purveyor wants to change routing coordinate with Architect, Civil Engineer, Owner, and construction manager prior to execution.

END OF SECTION 335000
SECTION 338000 – COMMUNICATION UTILITIES

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary conditions and other Division 00 and 01 specification sections, apply to this section.

Section 1.02 SUMMARY

A When equipment is furnished for or by the Owner as indicated on the Drawings or specified, this Contractor shall make all connections to Owner furnished equipment. The Contractor shall verify exact requirements and locations before installation.

B Related Sections includes the following:

(i) Division 1 General Requirements
(ii) Division 26 Electrical
(iii) Division 27 Communications
(iv) Division 28 Electronic Safety and Security

Section 1.03 SCOPE OF WORK

A The scope of work to be performed is to install empty conduit with pull string for future owner supplied vendor construction.

(i) Conduits to include the following:
   a) (2) 1” Power & Data Conduit from Future Building IT Room to Overhead Lift Gate
   b) (2) 1” Power & Data Conduit for Two Man Gates to the Future Building IT Room.

(ii) ATEC is the Building Vendor and will be responsible for installation of the Access Control System.
   a) www.a-tec.net
   b) 104 N. Hutchinson Rd. Spokane Valley, Washington 99212
   c) Phone: (509) 928-5400
   d) Email: kevinj@a-tec.net

B All Access control will be home run back to Building and connected to the building’s communications access to the web.

C There are no security systems on this project or the future building.

D This project is divided into two phases:
   (i) Site Development (Current Scope)
a) The Site development phase of this project includes the following scopes:

1) Power Utility Feed for Building

2) Power Utility Feed for Testing Trailers & Temporary Power for Job Trailer

3) Underground conduit for Telecommunications from adjacent Residency Lab (Existing) located Southwest from the building site.
   i) Provide Empty PVC Conduit with pull string as shown for future telecommunications. Communications lines to be installed at a later date.


(ii) Building Development (Future Scope)

a) Future electrical packages will be coming out denoting the construction of a Soils testing laboratory facility. This building will be a block structure with wood framing.

Section 1.04 SUBMITTALS

A Product Data & Informational Data for all materials to be used in the construction.

Section 1.05 QUALITY ASSURANCE

A All construction is to be constructed per National Electrical Standards and National Electrical Code (NEC).

B All construction is to be constructed per State of Idaho Codes and requirements.

C The contractor shall provide a manufacturer-written warranty for all installed products.

D If a subcontractor is utilized for any portion of the work, all contact information, references, material list, and any other information shall be provided per the specified contract bid requirements.

Section 1.06 PERMITTING

A State of Idaho Division of Occupational Professional Licensing (DOPL) is the permitting agency for this project. They will be performing all permits for this project.

B The electrical contractor will be responsible for securing all electrical permits needed to complete the scope of work shown and listed in the contract documents.

   (i) The cost of the permit is to be included in the scope of work.

Section 1.07 SPECIAL TESTING

A The Owner will provide Special Testing and Observation on this project. The owner will provide an initial test. If the testing fails it is the responsibility of the electrical contractor to re-test once the construction has been corrected. This includes additional tests upon each failure.

Section 1.08 GENERAL

A Comply with NEC, NFPA, and OSHA regulations.
Part 2. PRODUCTS

Section 2.01 GENERAL

A Refer to Electrical General Notes for material information. If a material specification is not available in the contract documents make the Architect, Engineer, and Construction Manager aware of the need for information through a Request for Information (RFI).

B All Materials and equipment provided under this contract shall be new (Except where otherwise noted) and shall be listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL) to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established. Materials and equipment which are not covered by UL Standards will not be accepted.

C All appropriate materials, products, and equipment being installed which fall into a category covered by the ENERGY STAR program shall be provided and labeled as such.

D All equipment of the same type and capacity shall be by the same manufacturer.

E Owner furnished equipment: Equipment furnished by the Owner shall be received, stored, uncrated, protected, and installed by the Contractor with all appurtenances required to place the equipment in operation, ready for use. The Contractor shall be responsible for the equipment as if he had purchased the equipment himself and shall hold the warranty.

Section 2.02 IDENTIFICATION OF UNDERGROUND UTILITIES AND PIPING

A WARNING TAPE: All underground piping and utilities shall have non-detectable warning tape that conforms to the following requirements to identify the specific system buried below. Warning tape shall meet OSHA regulation 1926-956 © (I). The tape shall be 6" wide with black lettering imprinted on a color-coded background that conforms to APWA color code specifications. Tape shall be installed between 18" to 30" above the top of the pipe and a minimum of 6" below grade.

B TRACER WIRE: All non-metallic pipes installed underground (except pipe containing electric wires and traceable communication lines) and all piping installed 6 feet or more below grade shall have a tracer wire installed along the length of the pipe. The tracer wire shall be taped to the pipe and not allowed to “float freely” within the backfill. The tracer wire shall be continuous without splicing from access point to access point along the length of the pipe. The tracer wire shall be accessible at all structures (valve boxes, meter pits, manholes, pull boxes, and lift stations) along the length of the pipe. The tracer wire shall have an access point at the beginning and ending points of the pipe run with no distance between the access points exceeding 400'-0" within the pipe run. The tracer wire shall have a color-coded jacket as follows:

(i) Electrical Distribution – RED

(ii) Communication – ORANGE

C Tracer wire for piping less than 12" diameter shall be a #12AWG and for piping greater than 12" diameter or 6 feet or more below grade shall be a #10 AWG and HS-CCS high strength copper clad steel conductor (HS-CCS), insulated with a 30 mil. High-density, high molecular weight polyethylene (HDPE) insulation, rated for direct burial use at 30 volts. HS-CCS conductor must be 21% conductivity for locating purposes, Break load 380# minimum. HDPE insulation shall be RoHS compliant and utilize virgin grade material. The insulation color shall meet the APWA color code standard for identification of buried utilities. Tracer wire shall be made in the USA. Any disturbance to this tape requires replacement after work is completed.

Section 2.03 MANHOLES AND STRUCTURES

A All manholes and underground shall either be constructed with precast concrete units or reinforced cast-in-place concrete.
B Refer to civil and electrical drawings for specifications.

C All manhole opening shall be installed to minimize surface water intrusion through the lid.

D In grassed areas, the opening shall be 3” above surrounding grade with a continuous gradual slope down from the opening; maximum slope is 1” per foot.

E In paved areas, the opening shall be 1” above the surrounding grade with continuous gradual slope down from the opening; maximum slope is 1/3” per foot.

F Joints between precast units shall be made using “Ram-Nek” sealant or approved equal.

Section 2.04 ELECTRICAL MANHOLES, SWITCH VAULTS, AND PULL BOXES

A Refer to electrical general notes for specification.

Part 3. EXECUTION

Section 3.01 GENERAL

A All work shall be installed in a neat, workmanlike manner in accordance with NEC (2017) Electrical & IECC (2018).

B The contractor shall provide scaffolding, staging, cribbing, tackle, hoists, and rigging necessary for placing his materials and equipment in their proper places in the project.

C The contractor shall pay costs for transportation of materials and equipment to the job site and shall include such costs in his or her proposal.

D During construction the contractor shall at all times maintain electrical utilities to the site without interruption. Should it be necessary to interrupt any electrical service or utility, the contractor shall secure permission in writing from Idaho Transportation Department for such interruption at least ten (10) business days in advance. Any interruption shall be made with the minimum amount of inconvenience to the owner and any shut-down time shall have to be on a premium time basis and such time to be included in the contractor’s bid. Arrange to provide and pay for a temporary power source as required to complete construction noted in the contract documents.

E Working clearance around equipment shall not be less than that specified in the N.E.C. for all voltages specified.

F Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity. Normal maintenance shall not require the removal of protective guards from adjacent equipment. Install equipment as close as practical to the locations shown on the Drawings.

(i) Where the Owner or Construction Manager determines that the Contractor has installed equipment not conveniently accessible for operations and maintenance, the equipment shall be removed and reinstalled as directed at no additional cost to the Owner.

(ii) “Conveniently Accessible” is defined as being capable of being reached without climbing or crawling over or under obstacles such as motors, pumps, belt guards, transformers, racks, piping, ductwork, raceways or similar.

G Site Piping: Give piping systems installed at a required slope.

H Provide Handholds as necessary to complete the system and provide proper access for maintenance.
I  Install all conduits in a clean and efficient manner. Make all bends minimal as possible. Conduit that is next to each other have them follow the same sweep to maintain high visual appearance. Great care to be take in the installation of all conduits, equipment, and fixtures to maintain a clean appearance.

J  Provide necessary clearance for future maintenance. If a conflict occurs notify Engineer, Architect, and Construction Manager.

END OF SECTION 338000
SECTION 337000 – ELECTRICAL UTILITIES

Part 1. GENERAL

Section 1.01 RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary conditions and other Division 00 and 01 specification sections, apply to this section.

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   a) Future electrical packages will be coming out denoting the construction of a Soils testing laboratory facility. This building will be a block structure with wood framing.

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END OF SECTION 337000