

DOCUMENT 00 90 10
ADDENDUM No. 1



PART 1 GENERAL

1.1 DOCUMENT INCLUDES

- A. Changes to the Bid Documents.

1.2 CONSTRUCTION CONTRACT

- A. The Construction Contract is known as Ogden Airport Well House Project.
- B. Date of this Addendum: March 24, 2020

PART 2 CHANGES

2.1 CHANGES TO PRIOR ADDENDA

- A. None

2.2 CHANGES TO BIDDING REQUIREMENTS

- A. Document 00 10 00 (Invitation to Bid)
 - a. 1.9 Bid Location and Opening; Revise item A to the following: “Sealed bids for furnishing all materials, labor, tools and equipment necessary to complete said work must be submitted on forms prepared by the City Engineer and are to be submitted to the office of the City Purchasing Agent, 2549 Washington Boulevard, 1st floor information desk, Ogden, Utah, until 2:00 p.m., Thursday, 4/2/2020. Bidders must enter the building on the west side as the main entrance towards Washington Boulevard will be closed. Bids will be opened by the City via Skype video call or other capabilities at 2:30 p.m. for contractors to listen and watch the opening. Results will be tabulated and posted to the City’s website. **LATE BIDS WILL NOT BE ACCEPTED.**”
- B. Document 00 20 00 (Instructions to Bidders)
 - a. 2.10 Opening of Bids: Revise item A to the following: “Bids will be opened and read aloud via Skype video call or other capabilities for contractors to listen and watch unless obviously non-responsive. An abstract of the amounts of the base schedule of prices and any alternate schedules will be made available for review after the opening of Bids.”
- C. Document 00 41 10 (Bid Schedule)
 - a. 2.1 Base Bid; Bid Schedule No. 1
 - i. Updated bid unit and bid quantities for bid items 16, 17, 18, 19, and 20
 - ii. Added bid item Nos. 32 and 33
 - b. 3.3 Traffic Control; Revise item B to the following: “Payment Covers: Costs associated with all labor, materials, and equipment required to

develop a traffic control plan in accordance with requirements of Ogden City; maintain smooth vehicular traffic flow on Airport Road, provide lane shifts during construction on Airport Road, and all other affected roads during the time of construction, including but not limited to: developing and implementing a traffic control plan; temporary signage, barriers, warning devices, flaggers, permanent restriping and marking the pavement if required (tape with tape, paint with paint for all crosswalks, turn arrows, etc.), and cleaning roads to maintain a clean condition with no accumulation of dirt, debris or other foreign objects as required by Specifications and permits.”

- c. 3.19 Asphalt Concrete Pavement; Revise item A to the following: “Measured per ton”
- d. 3.21 Modified bid item name to “Concrete Pavement, Reinforced, Bid Item No. 20”
- e. 3.21, Revised item B to the following: “Measured as a square foot item. Measurement and payment based on an installed area (field measured).”
- f. Add 3.32 – Stamped Concrete Parkstrip, Bid Item No. 32
- g. Add 3.33 – Concrete Sidewalk, Bid Item No. 33

2.3 CHANGES TO AGREEMENT AND OTHER CONTRACT FORMS

- A. None

2.4 CHANGES TO CONDITIONS OF THE CONTRACT

- A. Specification 00 72 00, General Conditions
 - a. Exhibit A – Updated Bid Quantities and Bid Units for Items 16, 17, 18, 19, & 20.
 - b. Exhibit A – Added Bid Item Nos. 32 and 33

2.5 CHANGES TO SPECIFICATIONS

- A. Specification 01 58 00, Project Identification and Signs
 - a. 3.1.B – Replace with the following: “Graphic design, style of lettering, colors: Coordinate with Ogden City.”
- B. Specification 08 33 23, Overhead Coiling Doors
 - a. 1.2.B – Delete Item 3
 - b. 1.4.A.2 – Replace with the following: “Rated capacities, operating characteristics, and furnished accessories.”
 - c. 2.7 – Delete item 2.7
 - d. 2.8.H.1 – Replace with the following: “Baked-Enamel Finish: Color as selected by Owner from manufacturer's full range. Color shall match colors of other doors on the building.”
 - e. 2.10.B – Replace with the following: “Baked-Enamel Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.”
- C. Specification 43 24 03, Vertical Turbine Pumps:
 - a. 2.3.A – Updated the Design Flow Capacity to 2725
 - b. 2.3.A – Updated the Minimum motor size to 700 HP

- c. 2.3.A – Updated Design Flow Capacity to 82%
 - d. 2.4.A, Discharge Head – Revised half-coupling size and number of half-couplings, Added reducer requirement
 - e. 2.5.D – Added a “licensed pump installer” for gravel and sounding tubes
 - f. 2.5.E – Added a “licensed pump installer” for well vent installation
 - g. 2.5.G – Replace with the following; “Pump shall be supplied with a water pre-lube system including piping, solenoid valve and all other equipment necessary to provide lubrication the pump shaft prior to pump start.”
- D. Specification 46 33 00, Chemical Feeding Equipment, General:
- a. 2.1.A – Revised the name of the required pump to CR 5-14.
 - b. 2.1.D – Revised inlet pipe size to 1.5 inches
 - c. 2.1.F – Revised the flow meter to a Rotometer per manufacturers recommendations
 - d. 2.1.G – Valve changed to a diaphragm valve
 - e. 2.1.O – Revised outlet pipe size to 1.5 inches
 - f. 2.1.R – Revised the valve to a brass valve
 - g. 2.1.U – Remove the dehumidifier requirement
 - h. Add section 2.3 (Spare Parts); None required.

2.6 CHANGE TO DRAWINGS

- A. Drawing No. C-01. Provided structural fill requirements for the existing excavation, see attached updated drawing.
- B. Drawing No. C-06. Added information on replacing sidewalk, curb and gutter and asphalt pavement and traffic control requirement, see attached drawing.
- C. Drawing No. M-02. Changed long radius 90 degree reducing bend to a 14” long radius bend with a 16x14 concentric reducer, see attached updated drawing.
- D. Drawing No. M-03. Revised item Number 1 and item Number 5, see attached updated drawing.
- E. Drawing No. GM-03. Updated sizes and number of half couplings, provided vent pipe option through discharge head, revised note 3, added note 5.
- F. Drawing No. E-03. Added requirement for lighting panels to include panel skirts and housekeeping pads for conduit install from the floor, see attached updated drawing.
- G. Drawing No. GE-03. Added requirement for Grade Bar to have a custom enclosure, see attached updated drawing.

2.7 DOCUMENT CLARIFICATIONS

- A. Who will be paying for SKM to program SCADA? The City has a contract with SKM to perform all programming.
- B. Do all conduits for wall mounted panels need to be located behind the panels? Yes, no visible conduits will be permitted.
- C. Are conduits required to be installed as part of the project? All conduits must be installed as part of the project. The locations of these conduits must be coordinated with the City prior to installation and must be part of the required conduit plan for approval.
- D. Will there be a fee for the water service tap? No fee will be applied by the City, coordinate the tap with Ted Bullock.
- E. Who will submit and the documents to the building department and pay fees? The Contractor is required to submit the Contract Documents to the City for review and

- approval for the building and excavation permits. The City will waive the fees for the required City Permits.
- F. What are the excavation and fill extents for the drainage basin? The City will backfill the existing excavated hole up to elevation 4438.33, 20” below the top of the gravel elevation of 4440.00. The contractor will be required to bring in the remaining 12” of structural fill and 8” of gravel. The contractor will also be required to infill the southeast side of the new drainage basin, approximately 20-ft, and shape the sides of the drainage basin.
 - G. The landscape rock indicated on the Drawing L-01, Peaches and Cream, and Nephi may be high priced items, are there other alternatives? The type of rock listed is the preferred type, the drawings do allow for an “or equal” product that are not as cost prohibitive.
 - H. Is the base course materials included with the asphalt and concrete work? All base course materials are included with the concrete work including, concrete sidewalks and curb & gutters, concrete slabs, etc. All base course materials under asphalt is covered in separate line item.
 - I. What is DSI and Denco’s responsibility with this project? DSI & Denco will be providing and installing all security equipment for the project. The Contractor will be responsible to provide the access holes, conduits, pull strings, and coordination for DSI & Denco to install the necessary security equipment and all conductors.
 - J. How do we run approximately 36 conduits in the block coming in and going out of the wall mounted PLC panel? The PLC panel will be supplied by SKM and they will ensure the panel is mounted to the floor.
 - K. How do we run the necessary conduits in and out of the lighting panels? Conduits may be combined per current NEC code. All conduits must be located in the walls, ceiling or floor so they are not visible. Possible recessing the panels in the wall may be considered.
 - L. What is SKM providing? SKM will provide the PLC Panel, Radio, Network Cabinet, and all equipment located in the cabinets.
 - M. Can you clarify the Painting System Number required for the Steel Piping in the Pump Room, DI Piping exposed in the vaults, and the DI Piping buried? The exposed steel piping in the pump room shall be System No. 4 as per specification 09 90 00; buried steel pipe shall be either a System No.2 or System No. 8 depending on if the pipe is concrete encased or not as per specification 09 90 00; exposed ductile iron piping in the vaults shall be coated per specification 33 41 05 with a shop coat of rust-inhibitive primer conforming to specification 09 90 00; buried DI pipe shall be asphaltic coated per specification 33 41 05.
 - N. The pump discharge head calls for an epoxy lining and a System No. 4 coating, can the same epoxy lining be used as the coating? No, System No. 4 is required on the outside of the discharge head. Color shall be as selected by the Owner.
 - O. Will the Chlorination Equipment require an inlet filter and pressure regulator? Yes, the contractor will be required to purchase and install an inlet filter and pressure regulator along with a PVC ball valve prior to the filter for operation of the tablet chlorinator. The tablet chlorinator will not be equipped with these items.

END OF ADDENDUM

DOCUMENT 00 10 00

INVITATION TO BID

PART 1 GENERAL

1.1 CONSTRUCTION CONTRACT

- A. Bidders are invited to bid on Construction Contract named as:

Ogden Airport Well House

- B. For information about the award of this Construction Contract, contact:
Eric Neil at (801) 495-2224.

1.2 DESCRIPTION OF WORK

- A. The location of the work is: 3715 South Airport Rd.
- B. The estimated cost of the work is \$ 1500000.
- C. The project shall be governed by these contract documents, special conditions, specifics related to the work, and all provisions of the Manual of Standard Specifications and Manual of Standard Plans 2017 Edition published by the Utah Chapter of the American Public Works Association (APWA) and Ogden City Engineering Standards and Amendments for Public Works Projects 2019 Edition which are applicable to the work are made a part of the Contract Documents by reference.
- D. The work to be performed consists of furnishing and installing the equipment, facilities, services and appurtenances thereto as included in the Contract Documents. The Work generally includes, but is not limited to, the following:
Equipping the newly drilled well and developing the site

1.3 BIDDERS' PRE-QUALIFICATION

- A. Bidders must have been pre-qualified to bid on this project.

1.4 BASIS OF BIDS

- A. Bids shall be on a unit price basis. Unsealed or segregated Bids will not be accepted.

1.5 CONTRACT TIME

- A. The Work will be Substantially Completed 365 calendar days after the date of the Notice to Proceed.

1.6 EXAMINATION AND PROCUREMENT OF DOCUMENTS

- A. Complete sets of Bid Documents will be available by down loading from the Ogden City website at “no cost”. A complete set of Bid Documents must be used in preparing Bids. Bidders are responsible for securing any and all addenda issued. Owner and Engineer assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

1.7 PRE-BID CONFERENCE

- A. A MANDATORY pre-bid conference will be held at 10:00 a.m. on Wednesday, 3/18/2020, at Ogden, Utah in the conference room of the City Engineer. All contractors intending to submit a bid are REQUIRED to attend to obtain relevant information concerning the project. Bidders are advised that information affecting drawings, specifications, conditions, scope of the Work, etc. may be discussed. Any questions concerning the specifications for said project will be discussed at this time, and Bidders will be made aware of special conditions involved in the construction of this project. OWNER assumes no obligation to disclose information discussed at the pre-bid conference to Bidders who do not attend. Absent Bidders assume all risk of failure to attend.

1.8 BID SECURITY

- A. Bid security in the amount of five (5) percent of the Bid must accompany each Bid in accordance with the Instructions to Bidders. Bid Security will be returned to each unsuccessful Bidder after tabulation and in accordance with Document 00 20 00, Section 2.3.D.

1.9 BID LOCATION AND OPENING

- A. Sealed bids for furnishing all materials, labor, tools and equipment necessary to complete said work must be submitted on forms prepared by the City Engineer and are to be submitted to the office of the City Purchasing Agent, 2549 Washington Boulevard, 1st floor information desk, Ogden, Utah, until 2:00 p.m., Thursday, 4/2/2020. Bidders must enter the building on the west side as the main entrance towards Washington Boulevard will be closed. Bids will be opened by the City via Skype video call or other capabilities at 2:30 p.m. for contractors to listen and watch the opening. Results will be tabulated and posted to the City’s website. **LATE BIDS WILL NOT BE ACCEPTED.**
- B. On the outside of the envelope, the bidder shall indicate the Construction Contract title, the name and address of the Bidder, and the date and time of Bid opening and the Bidder's return mailing address.

1.10 RIGHT TO REJECT BIDS

- A. The OWNER reserves the right to accept or reject any or all bids or to waive any informality or technicality in any bid that best serves its convenience and/or is found to be in the best interest of the City.

1.11 VALIDITY PERIOD FOR BIDS

- A. Bids shall remain valid for 45 days after the day of Bid opening. The three lowest bidders, per Document 00 20 00, Section 2.3 D, who withdraw their bid after Bid opening, but before expiration of said period, shall forfeit their bid security if Notice of Intent to Award to Bidder is made by OWNER.

1.12 GOVERNING LAWS AND REGULATIONS

- A. This project is not federally funded and does not require the payment of specific wage rates. Payroll submittal will not be required.
- B. As a condition of the contract, contractors are to register and participate in the status verification system, as defined in section 63-99a-103(1)(c) of the Utah Code or its successor provision, to verify the work eligibility status of the contractor's new employees that are employed in the State of Utah.
- C. Contractor is responsible for verifying the employment status of new employees who work under the contractor's supervision or direction. In addition, contractor must maintain and have available for review upon demand by city an affidavit from each contractor or subcontractor who works under or for the contractor certifying that such contractor or subcontractor has verified through the status verification system, as defined in section 63-99a-103(1)(c) of the Utah Code or its successor provision, the employment status of each new employee of the respective contractor or subcontractor that is employed in the State of Utah.
- D. By entering into this contract, contractor verifies that 1) it has registered in the status verification system or that it will register in the status verification system within thirty (30) days of being notified that it has been awarded the contract, and 2) that it participates in the status verification system to verify the work eligibility status of new employees as required by law. If at any time during the period of this contract, contractor fails to remain registered in or to participate in the status verification system or to maintain on file any required affidavit, city may terminate the contract for cause or, in the alternative, city may suspend work under the contract until contractor shows compliance with the requirements of this section. City shall not be responsible for any costs, damages, expenses, losses or other claims resulting from contract termination or contract suspension resulting from contractor's failure to comply with the status verification system requirements or to have on file any required affidavit, nor shall contract time be extended by virtue of such failure to comply with the requirements of this section.
- E. Bidders on this Work will be subject to the applicable provisions of all federal rules, laws and regulations or orders.
- F. Furnishing of W-9. Payment under this Agreement is contingent upon Contractor furnishing City with a signed and completed W-9 IRS tax form. Such form shall be attached hereto and incorporated herein. Contractor shall cooperate with City in furnishing any additional information City may need to comply with rules and regulations of the

Internal Revenue Service.

- G. Pursuant to the requirements of Section 3 of the Housing and Urban Development Act of 1968, the City has developed minority and women owned business affirmative action plans. The award of the Construction Contract shall be governed by these plans. A summary of the plans is included in the Contract Documents. Bidders should contact the federal contracts compliance clerk, telephone: 801-629-8000 regarding any questions concerning minority or women owned business.
- H. In compliance with Americans with Disabilities Act, (ADA) the following information is provided: FAX Number (801) 629-8735, TDD Number (801) 629-8701, Contact person: David G. Buxton Management Services Director, Ogden City.
- I. Ogden City encourages and welcomes bids from minority and women-owned businesses.

Ogden City Purchasing Agent

Published: March 24, 2020

END OF DOCUMENT

DOCUMENT 00 20 00

INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.1 DEFINED TERMS

- A. Terms used in the Bid Documents which are defined in Article 1.1 of the General Conditions will have the meanings indicated in the General Conditions.
- B. General Conditions: as published in Document 00 72 00 in the 2017 Manual of Standard Specifications by the Utah Chapter of the American Public Works Association and as published in Ogden City's 2019 Edition of the Engineering Standards and Amendments for Public Works Projects.

1.2 COPIES OF BID DOCUMENTS

- A. Complete sets of Bid Documents will be available by down loading from the Ogden City website at “no cost”. A complete set of Bid Documents must be used in preparing Bids. Bidders are responsible for securing any and all addenda issued. Owner and Engineer assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.
<https://ogdencity.com/264/Purchasing>
- B. Bid Documents are made available to Bidder only for the purpose of obtaining Bids on the work. No license or grant for any other use is given.
- C. Bidding Document copyrights shall remain with the Owner.
- D. All provisions of the **Manual of Standard Specifications and Manual of Standard Plans 2017 Edition** published by the Utah Chapter of the American Public Works Association (APWA) and **Ogden City Engineering Standards and Amendments for Public Works Projects 2019 Edition** which are applicable to the work are made a part of the Contract Documents by reference.

The APWA-Utah Chapter publications may be purchased online, as a set, at UTAH.APWA.net for \$75 and picked up at the Ogden site upon submission of the online printed receipt (e-mail confirmation of the purchase **does not satisfy** as proof of purchase).

The **Ogden City Engineering Standards and Amendments for Public Works Projects** are also available (Free Download) online at:
<https://ogdencity.com/DocumentCenter/View/8384/2019-Engineering-Standards-for-City-Projects>.

1.3 PRE-BID CONFERENCE

- A. A MANDATORY pre-bid conference will be held at 10:00 a.m. on Wednesday, 3/18/2020, at 2549 Washington Boulevard, Ogden, Utah in the 7th floor conference room of the City Engineer. All contractors intending to submit a bid are REQUIRED

to attend to obtain relevant information concerning the project. Representatives of Owner and Engineer will be present to discuss the Project.

1.4 COMPENSATION AND QUANTITIES

- A. In General: The bid price for any lump sum contract includes all labor, materials, and incidental work to fully complete the work in a satisfactory manner under the terms of the Contract Documents. Bidders are responsible to inform themselves of the character of the work to be performed.
- B. Lump Sum Work: The work is to be paid for on a lump sum basis, the lump sum will be the only sum paid.
- C. Unit Price Work: If any portion of the work is to be paid for on a unit price basis, payment will cover only work actually performed and materials actually supplied at the unit prices bid and on the terms set forth in the Contract Documents, irrespective of any quantity approximations in the Bid Documents. Any quantity approximations in the Bid Documents are stated as a basis for determining bids, and they do not fix the amount of work to be done or materials to be furnished. Stated quantities are estimates for the purpose of doing the class of work required. Actual quantities will vary. The Owner may deviate in either direction from any indicated quantities. The Bidder shall have no claim for any variation in quantity, except to the extent permitted in the General Conditions.

1.5 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

- A. In General: Bidders are permitted to converse with Engineer or Engineer's personnel having knowledge of the Project, Plans, Specifications, material sites, or conditions generally prevailing in the area of the project to aid in pre-bid investigations. The Owner is not bound by any statements or representations made by Engineer or Engineer's personnel before the bid opening or award of the Construction Contract, nor for any assumptions or conclusions reached by a prospective Bidder as a result of such communication unless the Engineer issues an Addendum to all prospective Bidders.

- B. Site, Access To: The lands upon which the work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Bidder in performing the work are identified in the Contract Documents. All additional off site lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Bidder.
- C. Contract Documents: The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 1.4; that without exception the Bid is premised upon performing and furnishing the work required by the Contract Documents; and, that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the work.
- D. Bidder's Obligations: The submission of a bid constitutes acknowledgement that Bidder has complied with all bidding instructions. It is the responsibility of each Bidder before submitting a Bid, to:
1. Examine the Contract Documents thoroughly;
 2. Visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the work;
 3. Consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the work;
 4. Study and carefully correlate Bidder's observations with the Contract Documents; and
 5. Identify and notify Engineer in writing in the manner set forth in article 2.1 below of all specific conflicts, omissions, errors or discrepancies in the Contract Documents, or if Bidder doubts their meanings.
 6. Investigate all applicable construction and labor conditions, quantities, and the character of the work as they affect cost, progress, performance, or furnishing of the work;
 7. Attend any pre-bid conference, which shall be mandatory if so designated in the Notice to Bidders;
 8. Review all available explorations and data concerning surface and subsurface conditions.

The failure or omission of any Bidder to receive or examine any form, instrument, Addendum or other document, visit the site and become acquainted with conditions there existing, or attend the pre-bid conference, shall in no way relieve any Bidder from obligations with respect to Bidder's bid or its obligation to furnish all material, equipment, labor and services necessary to carry out the provisions of the Contract Documents and to complete the contemplated work for the consideration set forth in its Bid. Submission of a Bid shall constitute prima facie evidence of compliance with these instructions.

- E. Deviations from the Terms of the Contract Documents: Owner will not accept any deviations whatsoever from the printed terms of the Agreement (Document 00 50 00) and the Contract Documents, except by Addendum or Change Order.

1.6 PHYSICAL CONDITIONS

- A. In General: Before submitting a Bid, each Bidder will be responsible for review of Owner's explorations, tests and data concerning surface conditions, subsurface conditions and underground facilities at or contiguous to the site, or otherwise, which may affect cost, progress, performance or furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents.
- B. Surface and Subsurface Conditions: Provisions concerning surface and subsurface conditions, if any, are set forth in the Geotechnical Data (Document 00 32 00). The document provides the identification of:
 - 1. Those reports of explorations and tests of subsurface conditions at the site which have been utilized by Engineer in preparing the Contract Documents; and
 - 2. Those drawings of physical conditions in or relating to existing surface and subsurface structures (except underground facilities) which are at or contiguous to the site which have been utilized by Engineer in preparing the Contract Documents.
- C. Underground Facilities: Information and data indicated in the Contract Documents regarding underground facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such underground facilities. The Owner does not assume responsibility for the accuracy or completeness thereof other than as provided in paragraph 4.3A.2 of the General Conditions or unless expressly provided in the Modifications to General Conditions (Document 00 81 00).
- D. Additional Explorations: On request in advance, and if possible, Owner will provide each Bidder access to the site to conduct any explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall obtain permits, fill all holes, clean up and restore the site to its former condition upon completion of such explorations. Bidder agrees to release, indemnify, defend and save the Owner harmless from all costs, damages and liabilities of any kind whatsoever, including reasonable attorneys' fees, that may arise during and after the performance of additional explorations.
- E. Modifications to the Contract Documents: Provisions concerning the adequacy of the data furnished for subsurface structures and underground facilities, and the possibility of changes in the documents due to differing conditions appear in Articles 4.2 and 4.3 of the General Conditions.

1.7 EFFECT OF SUBMITTING A BID

- A. Bidders are responsible to carefully examine the Contract Documents, visit the site, and fully inform themselves so as to include in the Bid a sum to cover the cost of all items. Bidder's failure or omission to receive or examine any form, instrument, addendum or other document, visit the site and become acquainted with existing conditions, or attend any pre-bid conference, shall in no way relieve Bidder from any obligations with respect to Bidder's Bid or the Construction Contract.
- B. By submitting a Bid, Bidder represents that Bidder has complied with all requirements of the Bid Documents; that the Bid is premised on properly performing

and furnishing the work required by the Contract Documents within the times specified; that the Bidder is informed of the conditions to be encountered and the character, quality and quantities of the work; and that the Bidder believes the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all term and conditions for performance and furnishing of the work.

- C. Submission of a Bid constitutes a promise that the Bidder will enter the Contract Documents in the form presented in the Contract Documents. Bidders should carefully examine all Contract Documents, including the required Bonds and insurance to be provided by the Bidder.
 - 1. The Performance Bond is a guarantee of faithful performance of the requirements of the Contract Documents, including all applicable warranties. The Payment Bond is a guarantee of payment of all labor, materials, or supplies used directly or indirectly in the prosecution of the work provided in the Construction Documents.
 - 2. The sum of the Performance Bond and the Payment Bond shall be increased or decreased during the course of the work in the event that Contract Modifications, Change Orders or Addenda increase or decrease the total contract price. The sum of each bond shall be in an amount equal to the completed contract price at the completion of the work.
 - 3. Owner does not provide any release of Performance Bonds or Payment Bonds. The bonds are in effect throughout all periods during which a suit may be brought under the provisions of applicable law.
- D. By submitting a Bid, Bidder represents that the matters stated therein are true and correct.

PART 2 BIDDING PROCEDURES

2.1 INTERPRETATIONS AND ADDENDA

- A. All requests for interpretation of the Contract Documents shall be made in writing and delivered to the Engineer no later than 72 hours prior to opening of Bids. Engineer will publish interpretations on the City Website in the form of a Written Addendum. If a Bidder's request for interpretation is not responded to by Engineer, Bidder shall not rely on any interpretation in the request which is contrary to the intent and terms of the Contract Documents.
- B. No oral interpretations shall be made to any Bidder. Owner will not be responsible for or bound by any statements, explanations, representations, conclusions, assumptions or interpretations made by any party, whether oral or written, except those duly issued in the form of written Addenda.
- C. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Engineer. Each statement made in an Addendum is part of the Contract Documents at the location designated in the Addendum. A statement issued in an Addendum shall have the effect of modifying a portion of the Bid Documents when the statement in the Addendum specifies a particular section, paragraph or text and states that it is to be so modified. Only the specified section, paragraph or text shall be so modified, and all other portions of the Bid Documents shall remain in effect.

- D. Except to postpone the Bid opening, no Addenda shall be issued within 48 hours of the Bid opening.
- E. Any Addenda so issued during the time of bidding shall be deemed to be included in the Bid. All Addenda shall become a part of the Contract Documents.
- F. Bidders shall sign to acknowledge their receipt of all Addenda issued. Bidders shall also acknowledge receipt of all Addenda in the space provided in the Bid.

2.2 EQUIPMENT AND MATERIAL OPTIONS PRIOR TO BID OPENING

- A. If a Bidder or Supplier wishes to use items of equipment or materials other than those identified in the Contract Documents, said Bidder or Supplier shall submit a written request for approval to the Engineer at least 10 calendar days prior to the date set for opening of bids.
- B. The procedure for submission of any such product option shall be as set forth in **Article 6.4 of the General Conditions**. It is the sole responsibility of the Bidder or Supplier to submit complete descriptive and technical information so that Engineer can make a proper appraisal.
- C. Engineer's failure to act upon such a request within three (3) days after receipt shall be deemed a denial thereof.
- D. Any such approval is at the sole discretion of the Engineer and will be in the form of an Addendum and posted on the website for all Bidder's Bid Documents indicating that the additional equipment or materials are approved as equal to those specified for the Project.

2.3 BID SECURITY

- A. Amount of Bid Security: A Bid Security must accompany each Bid. The total amount of the Bid on which Bid security is to be based shall be the sum of all items of the Bid constituting the maximum amount of the possible award to the Bidder. The Bond amount must equal at least five (5) percent of the total amount of the Bid.
- B. Bid Bond: The Bond shall accompany and be attached to the Bid and shall be issued by a surety company authorized to do business in the State of Utah. The Bond shall guarantee that the Bidder, if awarded the work will promptly enter into the Construction Contract to perform the work in the manner required by the Contract Documents.
- C. Cashier's Check: The Bid Security may be in the form of a certified check, cashier's check, or Bid Bond. No other form of Bid Security will be accepted. If a cashier's check is used in lieu of a Bid Bond, the cashier's check must be drawn on a bank doing business in the State of Utah and made payable to Ogden City Corporation. Note that personal or company checks are not acceptable as bid security. If a cashier's check is used in lieu of a Bid Bond or if the Bid Bond does not specifically so provide, a certificate from an approved surety company guaranteeing execution of performance and payment bonds in the full amount of the bid must accompany the bid.

- D. Return of Bid Security: Owner will return Bid security to Contractor within seven (7) days after receipt of the Construction Contract by Ogden City Purchasing Division. Bid Bonds and cashier's checks of the lowest three Bidders will be held until the Construction Contract is awarded and a signed copy received by Ogden City Purchasing Division or all bids have been rejected. All other bid securities shall be returned following the bid opening. The liability of Owner in regards to the checks shall be limited only to the return of the checks.
- E. Default: In the event of failure or refusal of the Bidder to enter into the Construction Contract and the delivery to the Owner a Performance Bond, Payment Bond and any other Bonds or documents required by the Contract Documents after Notice of Intent to Award by the Owner, the Bidder forfeits the sum of the Bid Bond or cashier's check as liquidated damages to the Owner.

2.4 CONTRACT TIME AND PUNCH LIST TIME

- A. Provisions concerning Contract Time and Punch List Time are set forth in the Agreement (Document 00 50 00).

2.5 LIQUIDATED DAMAGES

- A. Provisions concerning liquidated damages are set forth in the Agreement (Document 00 50 00).

2.6 BID FORM

- A. The Bid form (Document 00 40 00) identifies all forms comprising the Bid Documents. Additional copies may be obtained from Engineer.
- B. Bids by corporations must be executed in the corporate name by the president, vice-president or other corporate officer authorized to sign and properly attested to as an official act of the corporation. At the Owner's request, authority to sign shall be submitted.
- C. Bids by partnerships or joint ventures must be executed in the partnership or joint venture name and signed by a partner or joint venture, whose title and official partnership address must be shown. If a partnership or joint venture is the low bidder, the partnership or joint venture must also submit evidence to the Owner of the responsibility of the partnership or joint venture as a bidder in the manner directed by the Engineer.
- D. All names must be typed or printed under or near the signature. Signatures shall be in longhand.
- E. The Bid shall contain an acknowledgment of receipt of all Addenda. The Addenda numbers and date issued must be filled in on the Bid form.
- F. The Bidder's address, telephone number and facsimile number for communications regarding the Bid must be shown on the first page of the Bid form.
- G. The Bidder shall make no stipulations or alterations on the Bid forms. The Bidder must use only the Bid form and Bid Schedules as bound in the Contract Documents or as may be modified by Addendum. To bid for the work, Bidder is required to

submit the Bid (Document 00 40 00), the Bid Schedule (Document 00 41 10), Contract Time (Document 00 41 50), and Bid security to the Bid location indicated in the Invitation to Bid (Document 00 10 00).

- H. The Bidder must possess at the time of Bid Submittal all appropriate and required licenses and indicate such on the Bid form.
- I. Where the Bidder is wholly owned subsidiary of another company, the Bid must so state, and the owner or parent corporation also must agree to sign and be bound with the Bidder.
- J. The divisions and sections of the specifications, and the identifications of any Drawings, shall not control Bidder in dividing the work among subcontractors or suppliers, or delineating the work to be performed by any specific trade.
- K. The base Bid and alternates shall include all work required to be performed by the Contract Documents.

2.7 BID SCHEDULE

- A. Any work or material which is specified in the Contract Documents or which is necessary because of the nature of the work, but which is not listed separately in the Bid Schedule (Document 00 41 10) shall not be measured or paid for separately. The cost of such work or material shall be considered as included in the contract price.
- B. All blanks on the Bid Schedule (Document 00 41 10) must be completed in ink or by typewriter. If applicable, furnish both the unit and the total costs for each item. Total Bid numbers shall be stated in both figures and written form, and the signature of all persons signing shall be in longhand. Any corrections, alterations or erasures made by the Bidder on the Bid Schedule shall be initialed in ink by the Bidder.

2.8 SUBMISSION OF BIDS

- A. Bids shall be submitted at the time and place indicated in the Invitation to Bid (Document 00 10 00) and should be enclosed in a sealed envelope, marked with the project title, the name and address of the Bidder, and the date and the opening time for bids. If the Bid is sent through the mail or other delivery system the sealed envelope should be enclosed in a separate envelope with the notation "**BID EN-CLOSED**" on the face of it. It is the sole responsibility of the Bidder to deliver the Bid before the scheduled time.
- B. Alternate bids, other than those called for in the Bid form, will not be considered.
- C. No oral, telegraphic, telephonic, facsimile or modified bids will be considered.
- D. Joint bids must be clearly indicated on the completed proposal forms. Failure to do so may be cause for rejection of the bid.
- E. **Only the following documents need to be submitted with the bid: 00 40 00 (Bid), 00 41 10 (Bid Schedule), 00 41 50 (Contract Time), and The Bid Security.** Bidder will make no recapitulations, stipulations, alterations, alternate submissions, or modifications in any manner to any of the Contract Documents.
- F. Bidder shall submit an acceptable Bid which requires the full completion and submission of all four (4) Documents listed in Section E above.

2.9 MODIFICATION AND WITHDRAWAL OF BIDS

- A. At any time prior to the opening of Bids, Bids may be modified or withdrawn if a written withdrawal is signed by Bidder and delivered to the place where Bids are to be submitted.
- B. Within 24 hours after Bids are opened, any Bidder may file written notice with Owner that there was a substantial mistake made in the preparation of its Bid. Bidder must thereafter promptly demonstrate Bidder's mistake to the reasonable satisfaction of the Owner. If Owner agrees, Bidder may withdraw its Bid and the Bid security will be returned to the Bidder.
- C. When it appears a mistake has been made, or when the Owner desires an assurance of any matter, the Owner may request a Bidder to confirm the Bid in writing.

2.10 OPENING OF BIDS

- A. Bids will be opened and read aloud via Skype video call or other capabilities for contractors to listen and watch unless obviously non-responsive. An abstract of the amounts of the base schedule of prices and any alternate schedules will be made available for review after the opening of Bids.
- B. Any Bids received after the date and time specified in the Invitation to Bid (Document 00 10 00) will be returned unopened.

2.11 BIDS SUBJECT TO ACCEPTANCE FOR 45 DAYS

- A. All bids remain subject to acceptance for 45 days after the day of the Bid opening. Owner may, in its sole discretion, release any Bid and return the Bid security prior to that date.

2.12 NONDISCRIMINATION IN EMPLOYMENT

- A. Work under this Bid will obligate the Bidder and Subcontractors not to discriminate in employment practices.
- B. Bidders must, if requested, submit a compliance report concerning employment practices and policies in order to maintain their eligibility to receive the award of the Construction Contract.
- C. Equal opportunity employment shall be reflected in the racial and sexual composition of the Bidder's work force and the Owner urges an affirmative action program to overcome underutilization.
- D. Bidders are advised that the Construction Contract and its performance are subject to the applicable provisions of all laws and regulations. Bidder will be obligated upon written request, to give all applicable assurances of compliance in connection therewith.
- E. If federal nondiscrimination requirements are required, the Bidder shall be fully knowledgeable and comply with such requirements.

PART 3 AWARD OF CONSTRUCTION CONTRACT

3.1 QUALIFICATIONS OF BIDDERS

- A. Within seven (7) calendar days of Engineer's request, a Bidder, whose Bid is under consideration for award shall submit to the Engineer the following information for the Bidder. Engineer may request like information on Bidder's Subcontractors, or Bidder's Suppliers or any other information the Engineer may require.
 - 1. A current financial statement for the work (as provided to bonding company);
 - 2. A chronological list of "in progress" and "completed" construction work done by Bidder during the last three (3) years; including project name, address, owner, contact name, and current telephone number;
 - 3. Present construction commitments other than items listed in paragraph two (2) above;
 - 4. Proposed organizational structure such as firm ownership, project manager, progress scheduler, and superintendent for the work of this project;
 - 5. Owned and rented equipment which is to be used to do the work;
 - 6. Investigations, arbitration, litigation or claims which are pending, threatened, settled or otherwise disposed of within the last three (3) years;
 - 7. Evidence of ability to perform and complete the work in a manner and within the time limit specified. As a minimum, identify specific projects similar to the work in physical size, cost, and commercial nature. If the work experiences of the project manager and superintendent designated to construct this project are different than that of the company, provide resumes of their work history. Include their actual project titles and indicate their actual responsibilities on each given project;
 - 8. All matters consistent with federal, state and local laws and regulations; and
 - 9. Such other data as may be called for in the Modifications to Instructions to Bidders (Document 00 22 00) (if any).
- B. If Bidder believes any information should be held confidential for business reasons, Bidder must submit a written claim of business confidentiality for that particular information and include a specific statement of the reasons supporting the claim pursuant to Utah Code Ann. 63-2-308. Owner will hold all requested information confidential and upon request, will return such information to Bidder after acceptance or rejection of Bid.
- C. Untimely response or failure to provide the requested information by Bidder will release Owner of any obligation to further negotiate or consider the Bidder's Bid.

3.2 EVALUATION OF BIDS

- A. Owner reserves the right to reject any and all Bids; to waive minor informalities in the Bid Schedule and elsewhere so long as the informalities do not affect the Contract Documents or render the bid non-compliant with Laws and Regulation pertaining to bidding requirements; to negotiate and agree to contract terms with the successful Bidder; and to disregard non-conforming, non-responsive, unbalanced or

conditional Bids; and to withhold the award for any reason deemed in the best interests of the Owner.

- B. Owner reserves the right to reject any Bid if Owner believes that it would not be in the best interest of the Project or the Owner to make an award to that Bidder. Without limitation such rejection may be because the Bid is not responsive, or the Bidder is unqualified or of doubtful ability or the Bid or Bidder fails to meet any other pertinent standard or criteria established by Owner in the Supplementary Instructions to Bidders (Document 00 22 00).
- C. Owner will consider the qualifications of the Bidder (whether or not the Bid complies with the prescribed requirements) and such alternates, unit prices and other data, as may be requested in the Bid form (Document 00 40 00), Bid Schedule (Document 00 41 10), or written requests issued prior to Owner's Notice of Intent to Award the Construction Contract. If the Owner intends to make an award to a Bidder, a Notice of Intent to award will be issued.
- D. Owner may consider the qualifications and experience of Bidder, Subcontractors, Suppliers, and other persons and organizations proposed (whether or not the Bid otherwise complies with the prescribed requirements) for those portions of the work as provided in the Subcontractors and Supplier Report (Document 00 45 30).
- E. Owner may consider the operating costs, maintenance requirements, performance data and guarantees of ability to provide the required materials and equipment. (When such data is required to be submitted prior to the Notice of Intent to Award the Construction Contract.)
- F. Owner may consider:
 - 1. Such alternates, unit prices and other data, as may be requested in the Bid Form, Bid Schedule, or written requests issued prior to Owner's Notice of Intent to Award the Construction Contract.
 - 2. Corporate organization and capacity for any party.
 - 3. Ability to perform and complete the work in the manner and within the time specified.
 - 4. Pending litigation.
 - 5. The amount of the Bid.
 - 6. Proper licensing to do the work in compliance with licensing laws of the State of Utah for contractors and subcontractors.
 - 7. All other relevant matters, consistent with the Owner's procurement code and administrative rules, Owner's ordinances and program policies.
 - 8. To establish qualifications of Bidder, Owner may request such data indicated in Article 3.1 herein above and conduct such investigations as Owner deems appropriate, and consider any other information (whether obtained from the Bid, the Bidder, or any other source.)
- G. If the Construction Contract is to be awarded, it will be awarded to the most responsive and lowest, qualified, responsible Bidder as determined by the Owner. Alternates may be accepted depending upon availability of Owner funds. Bid

alternates may be considered at Owner's option in determining the most responsive, lowest, qualified, and responsible Bidder.

H. Bid Schedules will be evaluated as follows:

1. Discrepancies in the multiplication of quantities of work items and unit prices will be resolved in favor of the unit prices. Owner may correct Bid Schedule calculation errors accordingly.
 2. Prices written out in words shall govern over prices written out in numbers.
 3. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
 4. Bids shall not contain any recapitulations of or changes in the work to be done.
- I. The Owner, in the Owner's sole discretion, shall make determinations as to disqualification of Bidders or rejection of Bids. Such matters may include, without limitation, submission of more than one Bid by the Bidder (whether under the same or different names); evidence of collusion among Bidders; other commitments of Bidder which, in the Owner's sole judgment, might hinder the work; previous defaults, Bid irregularities when not waived in the best interests of the Owner, delays or poor performance by Bidder on any project; official action against Bidder; and any other cause which, in the Owner's sole discretion and judgment, is sufficient to justify disqualification of a Bidder or rejection of a Bid.

3.3 SUBCONTRACTORS, SUPPLIERS AND OTHERS

- A. Bidder shall not subcontract more than 49 percent of the dollar value of the total contemplated work (exclusive of the supply of materials and equipment to be incorporated in the work) without Owner's prior written approval.
- B. Conflict of interest pertaining to Subcontractors is described in paragraph 6.5H of the General Conditions.
- C. The following firms, which have been under contract to the Owner in the design phase of the work, shall not be used as subcontractors by the Contractor.
 1. Design Consultant: Bowen Collins & Associates
 2. Geotechnical Consultant: Gerhart Cole, Inc.
 3. Surveying Consultant: Apex Land Surveyors
 4. Mechanical Consultant: WHW Engineering
 5. Other: _____

3.4 CONTRACT SECURITY AND OTHER SUBMITTALS

- A. Performance Bond (Document 00 61 00) and Payment Bond (Document 00 62 00): The Owner's requirements as to Performance and Payment Bonds are as set forth in the 00 72 00 General Conditions - PART 5 - BONDS AND INSURANCE, Section 5.1 (as amended by Ogden City). Specific requirements are set forth in the Performance Bond (Document 00 61 00) and the Payment Bond (Document 00 62 00).
1. The form of the Bonds should be carefully examined by the Bidder.
 2. When the successful Bidder delivers the executed Construction Contract to Owner, it must be accompanied by the required Performance and Payment Bonds. Do not complete the Performance Bond, Payment Bond or Agreement at the time of Bid submittal.
- B. Subcontractor and Supplier Report (Document 00 45 30): This report form is required within 24 hours of Engineer's request. The form shall list the name and address, of each Subcontractor who will perform work or labor or render service to the Bidder at the site of the work, or a Subcontractor who, off the job site, will specially fabricate a portion of the work or improvement according to detail Drawings. In each instance, the nature and extent of the work to be sublet in an amount in excess of two (2) percent of the Bid sum shall be described. Bidder must have the written consent of Owner to substitute for any of the Subcontractors or Suppliers designated or to employ any Subcontractor or Supplier which is not listed.
- C. Bidder Status Report (Document 00 45 20): One completed form shall be submitted upon Engineer's request or after Bidder receives Notice of Intent to Award.
- D. Other Information: When a determination has been made to award the Construction Contract, Bidder is required, prior to the award or after the award, or both, to furnish such other information as the Engineer requests.

3.5 ADJUSTMENTS TO THE COST OF THE WORK AFTER OPENING OF BIDS

- A. The contract price identified in the Agreement (Document 00 50 00) represents the cost of the work which is to be paid by the Owner to the Contractor. Adjustments to the contract price which are agreed to between the Owner and the successful Bidder shall be effected by signing an Agreement Supplement (Document 00 50 50).

3.6 SUBSTITUTIONS

- A. The Construction Contract, if awarded, will be on the basis of materials and equipment described in the Drawings, Specifications and any Addenda.
- B. After the effective date of the Construction Contract, the procedure for submitting an application for substitution is set forth in Article 6.4 of the General Conditions.

3.7 SIGNING OF AGREEMENT

- A. Within ten (10) working days after Owner gives Notice of Intent to Award the Construction Contract to the successful Bidder, the Bidder shall pick up, sign and return the required number of copies of the Agreement (Document 00 50 00) and

attached documents to Owner with the required Bonds. A minimum of three (3) originals will be signed. One executed original will be returned to the Bidder. Bidder shall comply with all execution requirements.

- B. Transfers, delegations or assignments of interests in the Contract Documents are prohibited, unless prior written authorization is received from the Owner.
- C. At the time of Bidding, and the signing of the Agreement (Document 00 50 00), and at all times during the work, Bidder shall be properly licensed to do the work and shall be in compliance with the license laws of the State of Utah, Ogden City and Weber County. The Bidder shall also require all Subcontractors to do the same.
- D. All of Bidder's executions and submittals must be delivered to the Owner before Owner will execute the Construction Contract. The Construction Contract will not be deemed awarded and shall not be binding on the Owner until it has been approved and executed by the Owner, and a fully executed copy is formally delivered to the Contractor. The Owner reserves the right to rescind its Notice of Intent to Award without liability, except for the return of Bidder's Bid Security, at any time before the Construction Contract has been fully executed by all parties and delivered to the Contractor.
- E. If a Bidder fails to fully and properly execute the Construction Contract and provide all submittals required therewith within ten (10) days after the date of the Notice of Intent to Award, the Owner may elect to rescind the Notice of Intent to Award, and the Owner shall be entitled to the full amount of Bidder's Bid Security, not as a penalty, but in liquidation of and compensation for damages sustained. In the Owner's sole discretion, a Notice of Intent to Award may then be provided to another Bidder whose Bid is most advantageous to the Owner, price and other factors considered.

PART 4 MISCELLANEOUS

4.1 EQUIPMENT AND MATERIAL OPTIONS AFTER BID OPENING

- A. The Construction Contract, if awarded, will be on the basis of materials and equipment described in the Drawings, Specifications and any changes permitted in the Addenda.
- B. After the Effective Date of the Construction Contract, the procedure for submitting an application for substitution is set forth in Article 6.4 of the General Conditions.

4.2 PARTNERING

- A. Refer to Document 01 11 50 for description of partnering requirements.
- B. Owner's consultants listed in these contract documents and specifications will be partners to the project.

END OF DOCUMENT

DOCUMENT 00 41 10

BID SCHEDULE

PART 1 GENERAL

1.1 DOCUMENT INCLUDES

- A. Bid schedules.
- B. Measurement and payment provisions.

1.2 CONSTRUCTION CONTRACT

- A. The Construction Contract is known as:
Ogden Airport Well House

1.3 REFERENCES

- A. APWA 01 29 00: Payment Procedures.
- B. Document 00 50 00: Agreement.

1.4 SCHEDULE TO BE ADDED TO THE AGREEMENT

- A. This document will be added to the Bid and Agreement by reference.

PART 2 BID SCHEDULES

2.1 BASE BID

- A. Bid Schedule No. 1 below describes work basic to the Contract.

BID SCHEDULE No. 1

3715 South Airport Rd, Ogden Airport Well House

BID ITEM	DESCRIPTION	BID UNIT	BID QUANTITY	UNIT PRICE	CONTRACT AMOUNT
1	Mobilization/Demobilization	LS	1		
2	Traffic Control	LS	1		
3	Survey	LS	1		
4	Quality Control	LS	1		
5	Site Demolition and Earthwork	LS	1		
6	Pump House Mechanical & Piping, Complete	LS	1		
7	Construct Pump House Building, Complete	LS	1		
8	HVAC Equipment, Complete	LS	1		
9	Purchase Backup Generator & Automatic Transfer Switch (Includes 18" Concrete Equipment Pad)	LS	1		
10	SWPPP/Erosion Control	LS	1		
11	Repair Landscaping and Irrigation	LS	1		
12	Remove, Modify Existing Fence and Install New 20' Gate	LS	1		
13	Install Bollard	EA	28		
14	Construct New Storm Water Retention Basin, Complete	LS	1		
15	Site Fill	LS	1		
16	Sawcut Asphalt	LF	120		
17	Install New Curb and Gutter	LF	590		
18	Compacted Asphalt Pavement, PG 58-28	TON	240		
19	Untreated Base Course	CY	325		
20	Concrete Pavement, Reinforced	SF	3,150		
21	Pressure Relief Valve, Vault and 6-inch Piping	LS	1		
22	PRV and Valve Vault on Airport Road, Complete	LS	1		
23	60" Drain Manhole	EA	1		
24	48" Storm Drain Manhole	EA	1		
25	18" RCP Storm Drain Piping and Connection to Existing Box	LF	250		
26	DI piping, 16 inch, Including Connection to Existing	LF	110		
27	1" PEXa Waterline	LF	110		
28	Electrical, Complete	LS	1		
29	Tablet Chlorination, Complete	LS	1		
30	Polyphosphate Equipment, Complete	LS	1		
31	Security Camera, Alarms, Etc., Complete	LS	1		
32	Stamped Concrete Parkstrip	SF	160		
33	Concrete Sidewalk	SF	160		

Total = \$ _____

Schedule Total in Words _____

Signature _____

PART 3 MEASUREMENTS AND PAYMENT

3.1 GENERAL

- A. See measurement and payment procedures in APWA Section 01 29 00.
- B. ENGINEER will take all measurements and compute all quantities.
- C. CONTRACTOR will verify measurement and quantities.
- D. CONTRACTOR will provide all equipment, workers, and survey crews to assist ENGINEER in making measurements.
- E. Units of measurement are listed above in the bid schedule(s).

3.2 MOBILIZATION, Bid Item No. 1

- A. Measured by lump sum.
- B. Payment covers cost of mobilization, demobilization, installation of temporary facilities and bringing all necessary construction equipment to the site. Payment will be made on a percentage basis as follows.

Percent of Original Contract Amount Earned	Percent of Amount Bid for Mobilization to be Paid
5	40
15	20
40	30
50	10

3.3 TRAFFIC CONTROL, Bid Item No. 2

- A. Measurement: Measured and paid for on a Lump Sum basis.
- B. Payment Covers: Costs associated with all labor, materials, and equipment required to develop a traffic control plan in accordance with requirements of Ogden City; maintain smooth vehicular traffic flow on Airport Road, provide lane shifts during construction on Airport Road, and all other affected roads during the time of construction, including but not limited to: developing and implementing a traffic control plan; temporary signage, barriers, warning devices, flaggers, permanent restriping and marking the pavement if required (tape with tape, paint with paint for all crosswalks, turn arrows, etc.), and cleaning roads to maintain a clean condition with no accumulation of dirt, debris or other foreign objects as required by Specifications and permits.
- C. Payment shall also include all labor, materials, and equipment required to maintain safe pedestrian access through the project area during construction, including but not limited to signage, warning devices, PVC or polyethylene safety fencing, and maintaining a clean sidewalk that is free of dirt, gravel and other construction debris.

3.4 SURVEY, Bid Item No. 3

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to provide construction site surveying at the site to locate and coordinate with design drawings. Contractor will be responsible to pay for and coordinate all site features and conform to all other work required to complete the work as required in the Contract Documents.
- B. Measured as lump sum item.

3.5 QUALITY CONTROL TESTING, Bid Item No. 4

- A. Measurement will be made by lump sum.
- B. Payment: If additional control testing is requested by ENGINEER and testing shows product meets specification, such testing will be paid for by Change Order. (Refer to Section 01 45 00, Quality Control)

3.6 SITE DEMOLITION AND EARTHWORK, Bid Item No. 5

- A. Measurement and Payment: Costs associated with all labor, materials, and equipment required to clear and grub the existing site; cap ends of pipe; remove existing drain lines; remove and dispose of the existing buried pipes; dewatering; excavation and backfill in accordance with the requirements of the Contract Documents. Backfilling depressions left because of demolition work will not be measured or paid for separately except where structure or obstructions which are not designated for removal and disposal in the Bidding Documents, and which cannot be removed with equipment reasonably expected to be used in the Work without cutting, drilling, or blasting, will be paid for by **Change Order**.
- B. Measured as a lump sum item.

3.7 PUMP HOUSE MECHANICAL & PIPING, COMPLETE, Bid Item No. 6

- A. Payment covers the cost to purchase and install all the mechanical, and piping equipment inside the building. Installation and materials shall be of the size and type indicated on the construction documents.
- B. Measured as a lump sum item.
- C. Payment covers the cost of furnishing and installing pipe of the size and type identified on the drawings and all costs associated with supplying and installing mechanical items that includes, but not limited to: vertical turbine pump; water level sounding tube modifications, and gravel feed tube modifications; well casing modifications; pump motor; discharge head; sample tap; hose bib; meter; pipe supports, drain piping, all sheeting, shoring and bracing; fittings; tubing; painting of all piping and appurtenances; tees; valves; bends; sleeves; reducers; couplings; plugs; and caps; greasing and wrapping all buried fittings; corporation stops; joint lubricants; nuts, bolts and washers; thrust restraints; grout; jackhammer work; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; pipe line cleaning; water main repair or replacement if damaged by CONTRACTOR; and all other work required to complete the installation of the mechanical equipment including pressure testing, cleaning, disinfection, and commissioning of the pipeline.

3.8 CONSTRUCT PUMP HOUSE BUILDING, COMPLETE, Bid Item No. 7

- A. Payment covers the cost of constructing the pump building. Installation and materials shall be of the size and type indicated on the construction documents.
- B. Measured as a lump sum item.
- C. Payment covers the cost of furnishing and installing the concrete footings and foundation walls; concrete floor and all other concrete as shown on the drawings; pump to waste box and grate; chemical room; maintenance room; overhead bridge crane; backfilling of excavation; coordination, location and placement of pipe penetrations of the size and type identified on the drawings; all sheeting, shoring and bracing; hatch; CMU block building; reinforcement; roof system; doors and hardware; attic vents; removal and disposal of interfering structures and obstructions; concrete rings, cast iron rings, frame and lid as applicable; grout; jackhammer work; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; import fill, or native material up to the road base in the area surrounding the building; subgrade material, including placement and compaction; compaction density testing; and all other work required to complete the construction of the building.
- D. There will be no payment for over excavation unless approved in written form by the ENGINEER prior to the excavation.

3.9 HVAC EQUIPMENT, COMPLETE, Bid Item No. 8

- A. Payment covers the cost to purchase and install all the HVAC equipment outside and inside the building. Installation and materials shall be of the size and type indicated on the construction documents.
- B. Measured as a lump sum item.
- C. Payment covers the cost of furnishing and installing the HVAC systems of the size and type identified on the drawings and all costs associated with supplying and installing HVAC items that includes, but not limited to: ventilation fans; louvers; motorized dampers; routing of piping to each HVAC unit; valves; regulator; flexible piping; unit heaters; thermometers; grilles; metal duct work; painting of all piping and appurtenances; supports; piping; vents; nuts, bolts and washers; and all other work required to complete the installation of the HVAC equipment including testing, cleaning, and commissioning of the system.

3.10 PURCHASE BACKUP GENERATOR AND TRANSFER SWITCH, Bid Item No. 9

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase the generator and transfer switch, install all conduit and conductors, install the reinforced concrete generator pad, and all other items necessary for a complete and operable generator as indicated in the Contract Documents.
- B. Measured as a lump sum item.

3.11 SWPPP/EROSION CONTROL, Bid Item No. 10

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install the silt fencing, stabilized construction entrance, storm drain protection, and all other items necessary for the contractor to meet the requirements of

the Storm Water Pollution Prevention Plan as indicated in the Contract Documents.

B. Measured as a lump sum item.

3.12 LANDSCAPING AND IRRIGATION, Bid Item No. 11

A. Payment covers: All labor, material, tools and supplies required to supply and install pipe of the size and type to repair and/or relocate all heads to the edge of the asphalt pavement; PVC pipe; fittings; heads; nozzles; backfill; trenching; sod; 2" site gravel and weed barrier fabric and all items necessary for a complete operable system.

B. Measured as a lump sum item.

3.13 CHAIN LINK FENCES AND GATES, Bid Item No. 12

A. Measurement is made as a lump sum item.

B. Payment covers the cost of clearing and disposal; excavating high points; furnishing and placing concrete footings; connecting new fences to structures and existing fences; line posts; caps; couplings; top rail or tension wire; truss or tension bars; gates; gate supports; fittings and hardware; support or extension arm if any; and barbed wire if any.

3.14 INSTALL BOLLARD, Bid Item No. 13

A. Payment Covers: Costs associated with purchasing and installing the bollards including; all labor, materials, and equipment required to install bollards, filling bollards and rounding off the top of the bollard with concrete; concrete foundation; and all other additional work as indicated in the Contract Documents.

B. Measured as a per each item.

3.15 CONSTRUCT NEW STORM WATER BASIN, Bid Item No. 14

A. Payment Covers: Costs associated with all labor, materials, and equipment required to rough and final grade the detention basin; import fill; or native material meeting the specifications; 4" gravel and weed barrier fabric in the detention basin up to the top of the bank; rip-rap channels as shown on the drawings; removal and disposal of displaced soils; compaction density testing; adjustments to grade of existing valve boxes or lids or manholes; and all other work required to complete the work as required in the Contract Documents.

B. Measured as a lump sum item.

C. Payment does not cover the cost of Road Base or Asphalt materials.

3.16 SITE FILL, Bid Item No. 15

A. Payment Covers: Costs associated with all labor, materials, and equipment required to rough and final grade the site; import fill; or native material meeting the specifications up to the base course and subgrade prior to topsoil in unimproved areas; 6" of top soil in unimproved areas disturbed during construction; removal and disposal of displaced soils; compaction density testing; adjustments to grade of existing valve boxes or lids or manholes; and all other work required to complete the work as required in the Contract Documents.

B. Measured as a lump sum item.

C. Payment does not cover the cost of Road Base or Asphalt materials.

3.17 SAWCUT ASPHALT, Bid Item No. 16

A. Payment Covers: Costs associated with all labor, materials, and equipment required to sawcut the existing asphalt pavement as indicated in the Contract Documents.

3.18 INSTALL CURB AND GUTTER, Bid Item No. 17

A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install concrete curb and gutters; base course; and all other work required to complete the work as required in the Contract Documents.

B. Measured as a linear foot item for the amount measured in the field.

C. Payment covers the cost for road base materials beneath all curb and gutters.

3.19 ASPHALT CONCRETE PAVING, Bid Item No. 18

A. Measured per ton.

B. Payment covers the cost associated with all labor, materials, and equipment required to purchase and install the full thickness of hot-mixed, hot-laid asphalt concrete pavement. Hot mix asphalt shall be PG 58-28 grade with no more than 15% RAP.

3.20 UNTREATED BASE COURSE, Bid Item No. 19

A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install the base course materials below the asphalt, and shoulder areas; compaction density testing; and all other work required to complete the work as required in the Contract Documents.

B. Measured as a cubic yard item. Measurement and payment based on an installed area (field measured) X the design depth.

C. Payment does not cover the cost of fill, base course under curb and gutter, and base course under concrete materials.

3.21 6" CONCRETE PAVEMENT, Bid Item No. 20

A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install concrete pavement with reinforcing bars; concrete sidewalk around the building; expansion joint filler; compaction density testing; base course; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work required to complete the work as required in the Contract Documents.

B. Measured as a square foot item. Measurement and payment based on an installed area (field measured).

C. Payment covers the cost of fill materials.

D. Payment covers the cost for road base materials beneath all concrete pavement.

3.22 PRESSURE RELIEF VALVE, VAULT AND PIPING, Bid Item No. 21

A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install the precast concrete structure including; vault; frames and grates; ring and covers; 6-inch ductile iron piping; pressure relief valve; discharge piping to

detention basin; above ground pipe coating; dismantling joint; manhole steps; thrustblocking; structural fill; gravel; stop and waste valve and piping; all sheeting, shoring and bracing; removal and disposal of interfering structures and obstructions; grout; jackhammer work; dewatering; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; structure repair or replacement if damaged by CONTRACTOR; backfilling with import fill, or native material up to subgrade prior to topsoil in unimproved areas or base course in improved areas; removal and disposal of displaced soils; compaction density testing; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work as shown on the design drawings. Installation and materials shall be of the size and type indicated on the construction documents.

- B. Measurement: Payment will be made at the unit price, each, based upon the actual number of units installed.

3.23 PRV AND VALVE VAULT ON AIRPORT ROAD, COMPLETE, Bid Item No. 22

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install the precast concrete structure including; vault; frames and grates; rings and covers; 12-inch and 16-inch ductile iron piping; pressure reducing valve; butterfly valve; removal and relocation of existing valve, capping and abandoning existing pipes; modifications to the Weber Basin vault; placement and compaction of granular borrow; couplings; fittings; dismantling joint; manhole steps; thrustblocking; structural fill; gravel; all sheeting, shoring and bracing; removal and disposal of interfering structures and obstructions; grout; jackhammer work; dewatering; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; structure repair or replacement if damaged by CONTRACTOR; backfilling with import fill, or native material up to subgrade prior to topsoil in unimproved areas or base course in improved areas; removal and disposal of displaced soils; compaction density testing; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work as shown on the design drawings. Installation and materials shall be of the size and type indicated on the construction documents.
- B. Measurement: Payment will be made at the unit price, each, based upon the actual number of units installed.

3.24 STORM DRAIN MANHOLE, Bid Item Nos. 23 & 24

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install the precast concrete structures including; storm drain manholes; frames and grates; rings and covers; all sheeting, shoring and bracing; removal and disposal of interfering structures and obstructions; grout; jackhammer work; dewatering; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; structure repair or replacement if damaged by CONTRACTOR; backfilling with import fill, or native material up to subgrade prior to topsoil in unimproved areas or base course in improved areas; removal and disposal of displaced soils; compaction density testing; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work as shown on the design drawings.

Installation and materials shall be of the size and type indicated on the construction documents.

- B. Measurement: Payment will be made at the unit price, each, based upon the actual number of units installed.

3.25 18" RCP STORM DRAIN PIPING AND CONNECTION TO EXISTING BOX, Bid Item No. 25

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to install the storm drainage piping system including; connection of new piping to existing box; storm drain piping; core drilling of existing box; metallic warning tape; all sheeting, shoring and bracing; removal and disposal of interfering structures and obstructions; grout; jackhammer work; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; storm drain piping or structure repair or replacement if damaged by CONTRACTOR; backfilling trench with import material or cement treated flowable fill in the pipe zone, import fill, or native material in trench zone up to and including road base in improved areas and subgrade prior to topsoil in unimproved areas; removal and disposal of displaced soils; compaction density testing; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work required to complete the installation of the storm drain line and commissioning of the pipeline. Installation and materials shall be of the size and type indicated on the construction documents.
- B. Payment covers the cost to install the storm drain line from the pump to waste box to the existing box for the pump to waste system.
- C. Measured and paid for on a lineal foot basis, to the nearest foot, for the size and class indicated on the contract documents. Unless indicated otherwise, measurement to be along the pipe from center to center of manholes, or other structures, or to the end of pipe where no structures exist.

3.26 WATER MAIN PIPE, Bid Item No. 26

- A. Measured along the pipe with no reduction in length because of valves and fittings.
- B. Payment covers the cost of the size and type of pipe indicated, with installation per APWA Plan No. 381 and surface restoration not identified as separate pay items in the price schedule.
- C. Payment covers the cost of incidental work such as potholing, fittings, valves, corporation stops, couplings, joint lubricants, nuts, bolts and washers; valves, valve boxes, connection to waterline previously installed by the City, selective clearing and tree removal; saw cutting pavements; removal and disposal of interfering structures and obstructions; concrete rings, cast iron rings, frame and lid as applicable; grout; jackhammer work; pot hole excavations; trench shoring or trench boxes as applicable; all pipe zone and trench backfill materials; underground plastic line markers; cleaning of invert covers; tracer wire; concrete curb or gutter or sidewalk repair or replacement; landscape replacement if damaged by CONTRACTOR'S operations; removal and disposal of waste materials; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; chlorination; pressure testing; water main repair or replacement if damaged by CONTRACTOR; compaction density testing; adjustments to grade of existing valve

boxes or traffic lids or manholes; street surface restoration; and similar work to complete the installation of the water line.

3.27 WATER SERVICE CONNECTION, D=3/4" OR 1", Bid Item No. 27

- A. Measured by actual field count covers the system from the water main to the service meter.
- B. Payment covers the cost of the size of PEXa pipe indicated, with installation per APWA Plan No. 381 and surface restoration not identified as separate pay items in the price schedule.
- C. Payment covers the cost of incidental work such as but not limited to potholing, [service saddle clamp,] corporation stop [with 4 piece cast iron valve box with traffic lid,] [meter yoke,] [custom meter setter,] meter box with [ductile iron] [cast iron] cover,] [adapters necessary for a watertight connection to the existing service pipe within four feet of the residential side of the meter box,] [concrete thrust restraints,] fittings and structures, flushing the service prior to acceptance, adjustment of valve box lid(s) and meter box lid to final grade.
- D. There will be no payment for over excavation unless approved in writing by the ENGINEER prior to the excavation.

3.28 ELECTRICAL, COMPLETE, Bid Item No. 28

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install all electrical equipment including; conduits; conductors; placement of all conduits in the floors, walls, and ceiling; labeling of conduits and conductors; level controls; pressure transmitters; lighting; switches; outlets; breakers; panels; variable frequency drive; antenna; grounding; meter; ct enclosure and equipment; disconnect; transformer; trenching; backfill; restoration of all utilities damaged as a result of operations; site dewatering; pipe line cleaning; pipeline repair or replacement if damaged by CONTRACTOR; backfilling trench with import material or cement treated flowable fill in the pipe zone, import fill, or native material in trench zone up to and including road base in improved areas and subgrade prior to topsoil in unimproved areas; removal and disposal of displaced soils; compaction density testing and all other work required to complete the work as required in the Contract Documents.
- B. Measured as lump sum item.

3.29 TABLET CHLORINATION, COMPLETE, Bid Item No. 29

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install a complete tablet chlorination system and equipment including; piping; tablet chlorinator with built in weight scale, 150 lb tablet capacity, and solution tank; control panel, electric panel; meter pump; and all other work required to complete the work as required in the Contract Documents.
- B. Measured as lump sum item.

3.30 POLYPHOSPHATE EQUIPMENT, COMPLETE, Bid Item No. 30

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install a complete polyphosphate system and equipment including; piping; 250 gallon tank capacity; fittings; valves; adapters; supports; and all other work required to complete the work as required in the Contract Documents.
- B. Measured as lump sum item.

3.31 SECURITY CAMERA, ALARMS, COMPLETE, Bid Item No. 31

- A. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install all security equipment including; conduits; conductors; placement of all conduits in the floors, walls, and ceiling; labeling of conduits and conductors; alarms; security cameras; panels; and all other work required to complete the work as required in the Contract Documents.
- B. Measured as lump sum item.

3.32 STAMPED CONCRETE PARKSTRIP, Bid Item No. 32

- E. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install concrete pavement; stamped concrete parkstrip along Airport Road; expansion joint filler; compaction density testing; base course; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work required to complete the work as required in the Contract Documents.
- F. Measured as a square foot item. Measurement and payment based on an installed area (field measured).
- G. Payment covers the cost of fill materials.
- H. Payment covers the cost for road base materials beneath all concrete pavement.

3.33 CONCRETE SIDEWALK, Bid Item No. 33

- I. Payment Covers: Costs associated with all labor, materials, and equipment required to purchase and install concrete pavement; concrete sidewalk along Airport Road; expansion joint filler; compaction density testing; base course; adjustments to grade of existing valve boxes or traffic lids or manholes; and all other work required to complete the work as required in the Contract Documents.
- J. Measured as a square foot item. Measurement and payment based on an installed area (field measured).
- K. Payment covers the cost of fill materials.
- L. Payment covers the cost for road base materials beneath all concrete pavement.

END OF DOCUMENT

DOCUMENT 00 72 00

GENERAL CONDITIONS

PART 1 GENERAL

1.1 DEFINED TERMS

- A. Wherever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof. Any additions or changes to these General Conditions which appear in *italics* are taken from Ogden City's 2019 Edition of the Engineering Standards and Amendments for Public Works Projectsering Standards and Amendments (2019). **These italicized amendments or additions will supersede any terms, instructions or information** printed in the 2017 Manual of Standard Specifications by the Utah Chapter of the American Public Works Association(2017).
- B. .
1. Addenda: Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the Contract Documents. *The term Addendum shall include bulletins and all other types of written notices issued to potential Bidders prior to opening of Bids.*
 2. Agreement: A written instrument which is part of the Contract Documents, and which when signed by the OWNER and CONTRACTOR, establishes the contract price, the Contract Time, the Punch List time, the identity of the ENGINEER and other matters pertaining to the construction contract.
 3. Agreement Supplement: A written instrument executed by OWNER and Bidder in the time period between the opening of Bids and the signing of the Agreement which clarifies, corrects or changes the Contract Documents.
 4. Application for Payment: The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation required by the Contract Documents.
 5. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 6. Bid: The offer of the Bidder submitted on the prescribed form setting forth the price for the work to be performed.
 7. Bid Documents: The documents defined in the Bid, together with all Addenda and supplements issued prior to the effective date of the Agreement.
 8. Bid Security: Bid bond or cashier's check in an amount equal to a minimum of 5 percent of the Bid price.
 9. Bidder: Any person, firm, joint venture or corporation submitting a Bid directly to the OWNER, as distinct from a sub-bidder who submits a Bid to a Bidder.
 10. Bonds: Bid, Performance and Payment Bonds, cashiers or certified bank check and other instruments of security.
 11. Change Order: A written instrument prepared by the ENGINEER signed by CONTRACTOR and OWNER on or after the effective date of the construction

contract, which authorizes an addition, deletion, or revision in the work, or an adjustment in the contract price, Contract Time or both.

12. Claimant: An individual or entity having a direct contract with the CONTRACTOR or with a subcontractor or supplier of the CONTRACTOR to furnish labor, materials, supplies or equipment for use in the performance of the work. The intent of this definition shall be to include without limitation in the terms “labor, materials, supplies or equipment” that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the work, architectural and engineering services required for performance of the work of the CONTRACTOR and the CONTRACTOR’s subcontractors, and all other items for which a claim may be asserted where the labor, materials, supplies or equipment were furnished.
13. Construction Contract: The entire and integrated compact between the OWNER and CONTRACTOR, memorialized in the Contract Documents concerning the work to be performed which supersedes prior negotiations, representations of agreements, either written or oral.
14. Contract Documents: The Bid documents, Agreement, Agreement Supplement, General Conditions, supplementary conditions, Specifications, Standard Specifications, Drawings, Standard Plans together with all modifications issued pursuant to Article 3.3 herein after the effective date of the construction contract.
15. Contract Price: The total money payable by OWNER to the CONTRACTOR under the Contract Documents as stated in the Agreement and subject to the provisions of Paragraph 11.7A herein in the case of unit price work.
16. Contract Time: The number of consecutive calendar days or the date specified in the Agreement for substantial completion of the work.
17. CONTRACTOR: The person, firm or corporation named as such in the Agreement. *If the provisions are applicable to work performed by City personnel, under a permit or as a condition of development, the term shall also include the person, firm or corporation responsible for such work.*
18. Cost of the Work: The sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the work. See Article 11.4.
19. Day: Any 24-hour period measured from midnight to the next midnight.
20. Defective: An adjective which when modifying the word “work” refers to work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the contract documents, or has been damaged prior to ENGINEER’s final inspection (unless responsibility for the protection thereof has been assumed by OWNER at substantial completion in accordance with Paragraph 14.5A or 14.6B).
21. Drawings: The graphic and pictorial portions of the Contract Documents prepared or approved by ENGINEER, showing the design, location and dimensions of the work, and generally include the plan, elevations, sections, details, schedules and diagrams. Drawings are also known as plans.
22. Effective Date of the Construction Contract: The date indicated in the Agreement on which the construction contract becomes effective. If no such date is

- indicated, it means the date on which the construction contract is signed and delivered by the last of the two parties to sign and deliver.
23. ENGINEER: The person, firm or corporation designated in the Agreement as the OWNER's representative and agent for the construction contract, acting within the scope of the particular duties entrusted to such a person, firm or corporation. The person may be a licensed architect, licensed landscape architect, licensed ENGINEER, licensed land surveyor or other individual. *For Subdivisions and other projects issued under an engineering permit with Ogden City, which do not have an executed Agreement as noted above, the responsibilities of ENGINEER shall reside with Ogden City's Development ENGINEER.*
 24. Final Inspection: An inspection of the work (or agreed-to-portion), conducted by ENGINEER, after work (or agreed-to-portion) is substantially complete.
 25. General Requirements: Sections of Division 1 of the Standard Specifications and Specifications.
 26. Hazardous Waste: The term hazardous waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
 27. Inspection: The term "inspection" or its derivatives means a review of the project including, but not limited to, a visual review of the work completed to date. It does not include or imply an exhaustive or detailed review of the work, nor does it create a duty on the part of the ENGINEER or OWNER to detect latent defects.
 28. Laws and Regulations; Laws or Regulations: Any federal, state, county, city or local jurisdiction's laws, rules, regulations, ordinances, codes and orders.
 29. Lien: A charge, security interest or encumbrance upon materials or equipment.
 30. Lump Sum Work: Work to be paid for on the basis of a stipulated price.
 31. Major Unit Price Item of Work: Any item of unit price work which has total value greater than 5 percent of the initial contract price.
 - 31.a. Measurement of Failure: *The act of performing quality assurance through measurement by the City ENGINEER in accordance with the Specifications for Work which meet the definition of Failure as in the Amendments and Clarifications to the APWA or Defective as defined in the Standard Specifications.*
 32. Milestone: A principal event specified in the contract documents relating to an intermediate completion date or time prior to substantial completion of the work.
 33. Modification: Any Addendum, Agreement Supplement, Change Order, or Work Directive Change.
 34. Notice of Intent to Award: The written notice by OWNER to the apparent successful Bidder stating that on compliance by the apparent successful Bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the construction contract.
 35. Notice to Proceed: A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Time will commence and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the Contract Documents.

36. OWNER: The public body or authority, corporation, association or firm with whom CONTRACTOR has entered into the Agreement and for whom the work is to be provided.
31.a. *OWNER: Ogden City, a Utah Municipal Corporation.*
37. Partial Utilization: Placing a portion of the work in service for the purpose for which it is intended (or a related purpose) before reaching substantial completion for all the work.
38. PCBs: Polychlorinated biphenyl.
39. Petroleum: Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (to deg. Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-hazardous wastes and crude oils.
40. Plans: Drawings. *Graphic and pictorial productions from the ENGINEER or DEVELOPER, prepared or approved by the City, showing the design, location and dimensions of the Work, and generally include, the plan, elevations, sections, details, schedules and diagrams.*
41. Project: The total construction of which the work to be provided under the Contract Documents may be the whole, or a part.
42. Project Manual: The bound documentary package prepared for bidding and constructing the work.
- 31.a. *Public Works Inspector: The resident project representative furnished by the ENGINEER and assigned the duties of "inspection".*
43. Punch List: The list of unacceptable, incorrectly accomplished, damaged or unfinished work items compiled by ENGINEER at final inspection.
44. Punch List Time: The number of days specified in the Agreement for the completion of the final inspection Punch List work.
45. Radioactive Material: Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
46. Regular Working Hours: Computation of regular working hours shall be based upon a 40-hour work week.
47. Resident Project Representative: The representative of ENGINEER assigned to the site or any part thereof.
- 47.a. *Schedule of Values: The CONTRACTOR's best estimate of costs associated with various portions of the work.*
48. Shop Drawings: All Drawings, diagrams, illustrations, schedule and other data prepared by or for CONTRACTOR to illustrate some portion of the work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by suppliers and submitted by CONTRACTOR to illustrate material or equipment for some portion of the work.
49. Specifications: Those portions of the Contract Documents consisting of written requirements for materials, equipment, construction systems, standards and workmanship as applied to the work and certain administrative details applicable thereto. Bidding requirements, contract forms, and conditions of the contract are **not** Specifications.

50. Standard Plans: The *Drawings (both graphical and text)* contained in the *latest edition of the Manual of Standard Plans* published by the *Utah Chapter of the American Public Works Association*; also in the *Amendments to the Manual of Standard Plans* entitled "*Standard Drawings*" amended by *Ogden City*.
51. Standard Specifications: The Specifications contained in this manual following these General Conditions.
52. Subcontractor: An individual, supplier, firm or corporation having a contract with CONTRACTOR or with any other subcontractor for the performance of a part of the work.
53. Substantial Completion: A point in time when, in the opinion of the ENGINEER as evidenced by ENGINEER's written notice, the work (or a specified part thereof) has progressed to where it is sufficiently complete, and only occasional construction personnel and equipment are required for correcting unfinished or defective work. The remaining work will not interfere with the work area's intended use or occupancy. The terms "substantially complete" and "substantially completed" as applied to any work refer to substantial completion thereof.
54. Supplementary Conditions: The part of the Contract Documents that amends or supplements these General Conditions.
55. Supplier: A manufacturer, fabricator, distributor, material producer or vendor who provides products to the CONTRACTOR or subcontractors.
56. Underground Facilities: All pipelines, conduits, ducts, cables, wires, access chambers, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communication, cable television, sewage and drainage removal, traffic or other control systems or water.
57. Unit Price work: Work to be paid for on the basis of unit prices.
58. Work: The construction and services required to be furnished under the Contract Documents which may be the whole or part of the project. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, as required by the Contract Documents.
59. Work Completion: The work and all contractual obligations under the Contract Documents have been fulfilled and when final payment is due in accordance with Paragraph 14.9A.
60. Work Directive Change: A written directive to CONTRACTOR, issued on or after the effective date of the construction contract, prepared by the ENGINEER and signed by the OWNER, ordering an addition, deletion or revision in the work as provided in Article 10.1, or responding to differing or unforeseen physical conditions under which the work is to be performed as provided in Article 4.2 or 4.3 or to emergencies under Article 6.13. A work directive change requires agreement by the OWNER and the ENGINEER and may or may not be agreed to by the CONTRACTOR.

1.2 TERMS

- A. *Unless otherwise stated, the words directed, required, permitted, ordered, instructed, designated, considered necessary, prescribed, approved, acceptable, satisfactory, or*

words of like meaning, refer to actions, expressions, and prerogatives of the ENGINEER.

1.3 APPLICABILITY

A. Document 00 72 00, “General Conditions” and Division 1, “General Requirements” shall apply to all public works projects performed under contract with the city and also projects done under permit with Ogden City Engineering for work done on City property or within the City right-of-way, except as otherwise required by City Ordinance or recommended by the City Attorney. Except for definitions and terms applicable to other provisions of the manual, its provisions shall have no application to other work not performed under contract or permit with the city as indicated above.

PART 2 PRELIMINARY MATTERS

2.1 DELIVERY OF BONDS AND INSURANCE

A. When CONTRACTOR delivers the executed Agreement to OWNER, CONTRACTOR shall also deliver required bonds and insurance certificates.

2.2 COPIES OF DOCUMENTS

A. OWNER shall furnish to CONTRACTOR a digital copy of the Contract Documents unless hard copies are provided for in the Specifications. Additional copies will be available in electronic form for distribution from the OWNER at the request of CONTRACTOR.

B. *OWNER shall not furnish to CONTRACTOR published Contract Documents which include the current editions of the Manual of Standard Plans the Manual of Standard Specifications and the Ogden City Standards. Such documents shall be purchased separately by the CONTRACTOR.*

C. *Copies of all Contract Documents including the current edition of the Manual of Standard Plans, the Manual of Standard Specifications, and the Ogden City Standards shall be provided on site by the CONTRACTOR.*

2.3 COMMENCEMENT OF CONTRACT TIME – NOTICE TO PROCEED

A. Contract Time: Time is the essence of the contract. Unless indicated otherwise in the Bid documents, Addendum, or in a Change Order, in no event will the Contract Time commence later than the 74th day after the day of bid opening or the 30th day after the effective date of the construction contract, whichever date is earlier.

B. Notice to Proceed: A Notice to Proceed may be given at any time, even within 30 days after the effective date of the construction contract.

2.4 STARTING THE WORK

A. CONTRACTOR shall start to perform work on the date when the time for the Contract Time commences. No work shall be done at the site prior to that date.

2.5 BEFORE STARTING CONSTRUCTION

A. In General: Before starting each part of the work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall

- promptly report in writing to ENGINEER any conflict, error or discrepancy that CONTRACTOR may discover and shall obtain a written interpretation or clarifications from ENGINEER before proceeding with any work affected thereby.
- B. Submittals: Within 10 days after the effective date of the construction contract, CONTRACTOR shall submit to ENGINEER, in reasonable detail and form acceptable to ENGINEER, copies of the following documents.
1. Preliminary Progress Schedule: The preliminary progress schedule shall show starting and completion dates for each construction sequence and:
 - a. submittal dates and dates required for approved submittals for shop Drawings, product data and samples;
 - b. decision dates for products specified by allowances, selection of finishes and critical material or equipment release orders;
 - c. product procurement and delivery dates;
 - d. holiday cleanup preparations; and
 - e. specific dates for all special Inspections required prior to any utilities “turn-on” including temporary power.
 2. Preliminary Shop Drawing Schedule: A supplemental schedule to the preliminary progress schedule shall show all shop drawing submissions required for the work.
 3. Preliminary Schedule of Values: the preliminary schedule of values (for lump sum work), which includes provisions set forth in quantities and prices of items aggregating the contract price, shall subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of work. Bond expense shall not be prorated, but shall be shown as a separate item.
 4. Mobilization Program: The site mobilization program shall allow for field office and trailer locations, material storage locations, power requirements for trailers, if any, and sanitary facilities.
 5. Permits: The listing of, and photocopies of permits that the CONTRACTOR is required to purchase and maintain in accordance with Article 6.7.
 6. Quality Control Program: The written program for the control of product quality and workmanship.
 7. Safety and Protection Plan: The safety and protection plan shall comply with Article 6.12.
- C. Field Office: *The CONTRACTOR shall establish and maintain a field office in such a location that ENGINEER may always contact the CONTRACTOR for transmittal of plans, instructions and dissemination of project information. CONTRACTOR shall provide and maintain a telephone, computer with e-mail capabilities and facsimile machine in the field office during performance of the work.*

2.6 PRECONSTRUCTION CONFERENCE

- A. Within 20 days after the Contract Time starts to run, but before starting any work, CONTRACTOR shall attend a conference with ENGINEER and others:
1. to discuss the schedules referred to in Paragraph 2.5B;
 2. to discuss procedures for handling shop Drawings and other submittals;
 3. to discuss procedures for processing applications for payment;

4. to establish a working understanding among the parties as to the work;
5. to review or discuss other items deemed necessary by ENGINEER or CONTRACTOR; and
6. to designate the name of the individual who shall be CONTRACTOR's resident superintendent at all times while work is in progress. When the CONTRACTOR is comprised of two or more persons, firms, partnerships or corporations functioning on a joint-venture basis, before starting the work, CONTRACTOR shall designate in writing the name of a representative who shall have the authority to represent and act for the joint venture persons, firms, partnerships or corporations at all times while work is in progress.

2.7 FINALIZING SCHEDULES

- A. At least 10 days before submission of the application for payment, CONTRACTOR shall attend a conference with ENGINEER and others as appropriate to finalize the schedules submitted in accordance with Paragraph 2.5B.
 1. Progress Schedule: The finalized progress schedule must be acceptable to ENGINEER as providing an orderly progression of the work to completion within the Contract Time. The critical path must be fully defined. Acceptance will neither impose on ENGINEER responsibility for the progress or scheduling of the work, nor release or relieve the CONTRACTOR from full responsibility therefore.
 2. Schedule of Shop Drawings: The finalized schedule of shop Drawings submissions must be acceptable to ENGINEER as providing a workable arrangement for processing the submissions.
 3. Schedule of Values: The finalized schedule of values shall conform to the requirements of Articles 11.4 and 11.5 and must be acceptable to ENGINEER in form and substance.

2.8 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION

- A. Except as otherwise provided in the Contract Documents, or when direct communications have been specially authorized, the OWNER and CONTRACTOR shall communicate through the ENGINEER.
- B. Communication by and with ENGINEER's consultants shall be through the ENGINEER.
- C. Communications by and with subcontractors and suppliers shall be through the CONTRACTOR.
- D. Communications by and with separate CONTRACTORS shall be through the ENGINEER.

PART 3 CONTRACT DOCUMENTS, INTENT, AMENDING, REUSE

3.1 INTENT

- A. In General: It is the intent of the contract documents to describe a functionally complete project to be constructed in accordance with the contract documents.
- B. Contract Documents are Complementary: The Contract Documents are *complementary and cooperative and are intended to describe and provide for a complete project*; what is required by one document or provisions thereof is binding

as if required by all the documents or provisions thereof. *Anything in the Specifications and not on the Plans, or on the Plans and not in the Specifications, shall be as though shown or mentioned in both.*

- C. Incidental Work: Any work, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be supplied by CONTRACTOR at no additional cost to the OWNER whether or not specifically referenced.
- D. Technical or Trade Words: When words which have a well-known technical or trade meaning are used to describe work, materials or equipment, such words shall be interpreted in accordance with that meaning.

3.2 RESOLVING DISCREPANCIES

- A. References: Reference to manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest manual, code or laws or regulations in effect at the time of opening of Bids (or on the effective date of the construction contract if there were no Bids), except as may be otherwise specifically stated.
- B. Duties of CONTRACTOR or ENGINEER Not Changed: No provision of any referenced manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of CONTRACTOR or ENGINEER from those set forth in the contract documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of Paragraphs 9.9C or 9.9D.
- C. Conflict, Error, Discrepancy, Omission in Contract Documents: If, during the performance of the work, or omission in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once. Before proceeding with work affected thereby CONTRACTOR shall obtain a written interpretation or clarification from ENGINEER as provided in Article 9.4.
 - 1. Dimensions on Drawings: In the event of any discrepancy between the measured dimensions on any drawing and the written dimensions shown thereon, the written dimensions shall be taken as correct.
 - 2. Detail Drawings: Detail Drawings, regardless of trade or item of work, shall prevail over general Drawings.
 - 3. Work Shown on the Drawings: Any part of the work which is not mentioned in the Bid documents or specifications, but which is shown on the Drawings, shall be furnished and installed by CONTRACTOR as if fully described in the Bid documents or specifications and at no additional cost to the OWNER.
 - 4. Irreconcilable Conflict: Only in case of irreconcilable conflict between provisions within the Contract Document or between Contract Documents, the intent of the Contract Documents shall be interpreted in accordance within the following priorities.
 - a. A particular modification shall govern over all Contract Documents or modifications issued prior to said particular modification.

- b. These General Conditions shall govern over all Contract Documents except the Agreement, Agreement Supplement, supplementary conditions, Addenda and modifications.
 - c. The Specifications shall govern over Drawings, Standard Specifications, and Standard Plans.
 - d. The Drawings shall govern over the Standard Specifications and Standard Plans.
5. Notification Still Required: The priority provisions of Paragraph 3.2C4 above shall not relieve CONTRACTOR of notifying OWNER of such an irreconcilable conflict.
- D. Capitalization: Terms capitalized in these General Conditions include those which are (1) titles of OWNER, CONTRACTOR and ENGINEER, (2) the title of numbered Articles, and (3) the title of referenced documents. Capitalization is for emphasis only and shall not affect the meaning, content or effect of the Contract Document. If any terms are capitalized which do not fit within these categories, the capitalization shall be ignored.
- E. Headings: Any headings preceding the text of paragraphs in a Contract Document are inserted solely for convenience of reference and shall not affect its meaning, content or effect or be referred to in any interpretation thereof.

3.3 AMENDING AND SUPPLEMENTING CONTRACT DOCUMENTS

- A. The Contract Documents may be amended on or after the effective date of the construction contract to provide for additions, deletions and revisions in the work or to modify the terms and conditions thereof in one or more of the following ways:
 - 1. a Work Directive Change (Paragraph 10.1B); or
 - 2. a Change Order (Paragraph 10.1C).
- B. As indicated in Articles 11.2 and 1.21, contract price and Contract Time may only be changed by a Change Order.
- C. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the work may be authorized, in one or more of the following ways:
 - 1. ENGINEER's review of a shop drawing or sample (pursuant to Paragraphs 6.14F and 6.14G); or
 - 2. ENGINEER's written interpretation or clarifications (pursuant to Article 9.4).

3.4 REUSE OF DOCUMENTS

- A. Neither CONTRACTOR nor any subcontractor or supplier or other person or organization performing or furnishing any of the work under a direct or indirect contract with OWNER shall have or acquire any title to or ownership rights in any of the Drawings, specifications or other documents (or copies of any thereof) prepared by or for ENGINEER; and they shall not reuse any of them on extensions of the project or any other project without written consent of OWNER.

3.5 INTERPRETATION AND VENUE

- A. The Contract Documents will be construed in accordance with the laws of the State of Utah. Any court action arising from the construction contract shall be brought in an

appropriate federal or state court with appropriate jurisdiction in which the OWNER resides.

PART 4 AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.1 AVAILABILITY OF LANDS

A. OWNER shall furnish the lands upon which the work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR in the Contract Documents. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER unless otherwise provided in the Contract Documents. In the event of OWNER's delay in furnishing these lands, rights-of-way or easements, if CONTRACTOR believes that any delay entitles CONTRACTOR to an increase in the contract price or an extension of the Contract Time, CONTRACTOR may make a claim therefore as provided in Parts 11 and 12 hereof. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 PHYSICAL CONDITIONS – GENERAL

- A. Explorations and Reports: Reference, when applicable, is made to geotechnical data in the Bid documents for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports at the locations and the indicated depths where the data was obtained, but not upon the other information, interpretations or opinions contained therein or for the completeness thereof, expressed or implied. Except as indicated in the immediately preceding sentence and in Paragraph 4.2C, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.
- B. Existing Structures: Reference, when applicable, is made to the supplementary conditions for identifications of those Drawings of physical conditions in or relating to existing surface and subsurface structures (except underground facilities referred to in Article 4.3) which are at or contiguous to the site that have been utilized in preparing the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such Drawings, but not upon the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in Paragraph 4.2C, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.
- C. Differing Site Conditions: If CONTRACTOR believes that any technical data on which CONTRACTOR is entitled to rely as provided in Paragraphs 4.2A and 4.2B is inaccurate, or any physical condition uncovered or revealed at the site differs materially from that indicated in the Contract Documents, or unknown physical conditions exist at the site which are of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the construction contract, CONTRACTOR shall immediately notify ENGINEER in writing before performing any work in connection

therewith. Failure by the CONTRACTOR to give notice about the inaccuracy or difference, and the performance of any work in connection with said differing site conditions (except in an emergency as permitted by Article 6.13), shall bar the CONTRACTOR from making any claim for additional compensation in connection therewith.

1. ENGINEER's Review: ENGINEER will review the alleged or claimed differing conditions and determine if it is necessary to obtain additional explorations or tests with respect thereto.
 2. Possible Document Change: If the ENGINEER concludes that there is a material error in the Contract Documents, or that a change in the Contract Documents is required, a Change Order will be issued as provided in Part 10 to reflect and document the consequences of the inaccuracy or difference.
 3. Possible Price and Time Adjustments: For such possible document change an increase or decrease in the contract price or an extension or shortening of the Contract Time, or any combination thereof, may be allowable to the extent the ENGINEER determines that they are attributable to any such inaccuracy. If ENGINEER and CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefore as provided in Parts 11 and 12.
- D. Hazardous Substances: Neither OWNER nor ENGINEER are aware of any hazardous substances which may be encountered in performance of the work except as may be specifically disclosed elsewhere in the Contract Documents. Neither OWNER nor ENGINEER have specifically inspected the site to determine any such presence except as disclosed in the Contract Documents.

4.3 PHYSICAL CONDITIONS – UNDERGROUND FACILITIES

- A. Shown or Indicated: The information shown or indicated in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the OWNERS of such underground facilities or by others. OWNER shall not be responsible for the accuracy or completeness of any such information.
1. One-call Center: The CONTRACTOR shall have full responsibility for reviewing and verifying all such information, with the one-call center (Blue Stake location center) or other utility coordination service a minimum of 2 working days prior to any excavation to locate all underground facilities shown or indicated in the Contract Documents. The CONTRACTOR shall have full responsibility for any damages to underground facilities or costs resulting from the damage to such facilities, in those instances where the CONTRACTOR did not dependently locate and verify the location of such facilities.
 2. Tolerances: The information presented is considered accurate to within 3 feet vertical and 4 feet horizontal on each side of the utility location shown on the Drawings. Should a utility so shown not be within said tolerances, said utility shall be handled as outlined in Paragraph 4.3B below.
 3. Coordination: The CONTRACTOR shall coordinate the work with the OWNERS of such underground facilities during construction and shall be responsible for the safety and protection thereof as provided in Article 6.12.

4. Costs: If work is performed within the above referenced tolerances, the cost of all of the above including repair of any damages therein resulting from performance of the work, will be considered as having been included in the contract price and no additional compensation will be allowed therefore.
- B. Not Shown or Indicated: If an underground facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any work affected thereby (except in an emergency as permitted by Article 6.13), identify the OWNER of such underground facility and give written notice thereof to that OWNER and to ENGINEER.
1. ENGINEER to Modify Contract Documents: ENGINEER will promptly review the underground facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the underground facility, and the Contract Documents will be amended or supplemented to the extent necessary.
 2. Safety and Precaution: During such time, CONTRACTOR shall be responsible for the safety and protection of such underground facility as provided in Article 6.12.
 3. Contract Price or Contract Time Adjustment: CONTRACTOR may be allowed an increase in the contract price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any underground facility that was not shown or indicated in the Contract Documents, or that was not identified by the CONTRACTOR where such identification could have been made through a reasonably prudent investigation by the CONTRACTOR.
 4. Claims: If the parties are unable to agree as to the contract price or Contract Time adjustments, CONTRACTOR may make a claim therefore as provided in Parts 11 and 12.

4.4 REFERENCE POINTS AND MONUMENTS

- A. OWNER shall provide land surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the work. CONTRACTOR shall be responsible for laying out the work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written permission of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.
- B. CONTRACTOR shall not disturb any survey monuments found on the line of the improvements until ordered by the ENGINEER. No survey monument shall be disturbed or moved until ENGINEER has been notified and ENGINEER has referenced the survey monument for resetting.

4.5 ASBESTOS, PCBs, PETROLEUM, HAZARDOUS WASTE FOR RADIOACTIVE MATERIAL

- A. Neither OWNER nor ENGINEER are aware of any hazardous substances which may be encountered in performance of the work except as may be specifically disclosed elsewhere in the Contract Documents. Neither OWNER nor ENGINEER have specifically inspected the site to determine any such presence except as disclosed in the Contract Documents. The provisions of Articles 4.2 and 4.3 shall not apply to asbestos, PCBs, petroleum, hazardous waste or radioactive material uncovered or revealed at the site.

PART 5 BONDS AND INSURANCE

5.1 PERFORMANCE, PAYMENT AND OTHER BONDS

- A. *Prior to OWNER executing the Agreement, CONTRACTOR shall file with the OWNER a good and sufficient Performance Bond and a Payment Bond, each in the sum of not less than 100 percent of the contract price.*
- B. *The bonds shall be executed by the CONTRACTOR and secured by a company duly and regularly authorized to do a general surety business in the State of Utah and named in the current list of companies holding certificates of authority as acceptable sureties on federal bonds and as acceptable reinsuring companies as published in current Circular 570 (amended) by the Audit Staff bureau of Accounts, U.S. Treasury Department, with an underwriting limitation equal to or greater than the contract price which the bond guarantees or with a current "A-" rating or better in A.M. Best Co., Inc.'s Best Insurance Reports, Property and Casualty Edition.*
- C. *Said bonds shall guarantee the faithful performance of the construction contract by the CONTRACTOR and payment of labor and materials. They shall inure by their terms to the benefit of the OWNER. Neither this nor any other provision requiring a Performance Bond shall be construed to create any rights in any third party claimant as against the OWNER for performance of the work under the construction contract.*
- D. *If the surety on any bond furnished by CONTRACTOR is subject to any proceeding under the Bankruptcy Code (Title 11, United States Code) or becomes insolvent or its right to do business is terminated in the State of Utah or it ceases to meet the requirements of this Article, CONTRACTOR shall, within 15 days thereafter, substitute another bond and surety, both of which must be acceptable to OWNER.*

5.2 INSURANCE

- A. *In General: All policies of insurance provided shall be issued by insurance companies qualified to do business in the State of Utah and listed on the U.S. Treasury Department's current Department of Treasury Fiscal Services List 570, or having a general policy holder's rating of not less than "A-" in the most current available A.M. Best Co., Inc.'s Best's Insurance Report.*
- B. *Insurance Requirements: CONTRACTOR shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR, its agents, representatives, employees or subcontractors. The cost of such insurance shall be included in CONTRACTOR's Bid. The amount of insurance shall not be less than:*

1. Commercial General Liability: \$1,000,000 combined single limit per occurrence and \$2,000,000 general aggregate for bodily injury, personal injury and property damage. Policy to include coverage for premises and operations, contractual liability, personal injury liability, products/completed operations liability, broad-form property damage (if applicable) and independent CONTRACTORS' liability (if applicable) written on an occurrence form.
 2. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage for owned, non-owned and hired autos.
 3. Workers' Compensation and Employers' Liability: Workers' compensation limits as required by the labor code of the State of Utah and employers' liability with limits of \$1,000,000 per accident.
- C. Each insurance policy required by this Agreement shall contain the following clauses:
1. "This insurance shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty days prior written notice by certified mail, return receipt requested, has been given to the City."
 2. "It is agreed that any insurance or self-insurance maintained by Ogden City, its elected and appointed officials, employees, agents and volunteers shall be excess of CONTRACTOR's insurance and shall not contribute with insurance provided by this policy."
- D. Each insurance policy required by this Agreement, excepting policies for Workers' Compensation, shall contain the following clause:
1. "Ogden City, its elected and appointed officials, employees, volunteers and agents are to be named as additional insureds as respect to operations and activities of, or on behalf of, the named insured as performed under Agreement with the City."
- E. Insurance is to be placed with insurers acceptable to and approved by the City. CONTRACTOR's insurer must be authorized to do business in Utah at the time the contract is executed and throughout the time period the contract is maintained, unless otherwise agreed to in writing by the City. Failure to maintain or renew coverage or to provide evidence of renewal will be treated by City as a material breach of contract.
- F. The City shall be furnished with original certificates of insurance and endorsements effecting coverage required within, signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be received by the City before work commences.
- G. The City reserves the right to require complete, certified copies of all required insurance policies at any time.
- H. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either:
1. the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its elected and appointed officials, employees, agents and volunteers;
 2. or CONTRACTOR shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.

- I. *CONTRACTOR shall include all subcontractors and insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.*
- J. *Nothing contained herein shall be construed as limiting in any way the extent to which CONTRACTOR may be held responsible for payments of damages to persons or property resulting from CONTRACTOR's or its subcontractor's performance of the work covered under this Agreement.*
- K. *Builder's Risk: CONTRACTOR agrees to and assumes the risk of loss for any damage or loss to the work and project by any means or occurrence until substantial completion. CONTRACTOR further agrees to obtain builder's risk or course of construction insurance in the total amount of the contract price.*

PART 6 CONTRACTOR'S RESPONSIBILITIES

6.1 CONTROL OF THE WORK

- A. Means, Methods, Techniques, Sequences, Procedures of Construction:
CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. CONTRACTOR shall be responsible to ensure that the completed work complies with the Contract Documents. CONTRACTOR shall supervise, direct and control the work competently and efficiently. CONTRACTOR shall devote such attention thereto and applying such skill and expertise as necessary to perform the work in accordance with the Contract Documents.
- B. Resident Superintendent: CONTRACTOR shall designate in writing and keep on site at all times during the progress of the work a competent resident superintendent. The superintendent shall not be replaced without written notice to ENGINEER except under extraordinary circumstances. The superintendent shall have authority to act on behalf of CONTRACTOR.
- C. Communications: All communications given to the resident superintendent by ENGINEER shall be as binding as if given to CONTRACTOR. If CONTRACTOR's resident superintendent is not present on site or on any part of the work, ENGINEER may give communications to an employee of the CONTRACTOR or to the CONTRACTOR's subcontractor or suppliers who may have charge of the particular portion of the work in reference to which the communications are given. Without being contrary to the provisions of Paragraphs 9.9C or 9.9D, such communications shall be considered given by the ENGINEER to the CONTRACTOR when confirmed in writing and delivered to the CONTRACTOR's resident superintendent.
- D. CONTRACTOR not Agent of OWNER: ENGINEER's right to enforce provisions of the Contract Documents shall not make the CONTRACTOR, nor the CONTRACTOR's agents, employees, subcontractors, or suppliers, agents of the OWNER. The liability of the CONTRACTOR for all damages to persons or to public or private property, arising from CONTRACTOR's execution of the work, shall not be diminished because of ENGINEER's enforcement of the Contract Documents.

6.2 LABOR, MATERIALS AND EQUIPMENT

- A. Personnel and Discipline: CONTRACTOR shall provide competent, qualified personnel to survey and lay out the work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. If any subcontractor or employee or the CONTRACTOR shall appear to ENGINEER to be incompetent or to act in a disorderly or disobedient manner, the person shall be immediately removed from the project upon the request of the ENGINEER, and such person shall not be employed again on the work.
- B. Regular working hours: Except in connection with the safety or protection of persons or the work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all work at the site shall be performed during regular working hours.
- C. Overtime: If CONTRACTOR permits overtime work *beyond the standard hours of operation for Ogden City Engineering employees or permits the performance of work on Saturday, Sunday or any legal holiday* CONTRACTOR shall do so at no increase to the contract price and shall give prior written notice to ENGINEER. *CONTRACTOR shall be responsible for all additional costs associated with overtime incurred by OWNER, ENGINEER or their representatives or assistants. Said costs may be considered as deductions from the amounts payable to the CONTRACTOR at the discretion of the ENGINEER.*
- D. Temporary Facilities: Unless otherwise specified in the Contract Document (e.g. OWNER-supplied materials, etc.), CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, completion or suspension of the work.
- E. Materials and Equipment: All materials and equipment shall be applied installed, connected, erected, used, cleaned and conditioned in accordance with instructions of the applicable supplier, except as otherwise provided in the Contract Documents; but no provision of any such instructions shall be effective to assign to OWNER, ENGINEER or any of OWNER's representatives, consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.9C or 9.9D. All warranties and guarantees specifically called for in the specifications shall expressly run to the benefit of the OWNER.
1. Adequate, Safe and Suitable Equipment: The CONTRACTOR shall provide adequate, safe and suitable equipment to meet the work requirements, and when ordered by the ENGINEER, shall remove unsuitable equipment from the work.
 2. Operating Construction Equipment on Site: No construction equipment or machinery shall be operated upon paved streets, sidewalks, landscaped areas or prepared roadway shoulders which may be injurious to said areas.
 3. Quality, New: All materials and equipment to be installed in the work shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment.

4. Certificate of Compliance: The ENGINEER may permit the use of certain materials or assembly prior to sampling and testing if accompanied with a certificate of compliance stating that materials involved comply in all respects with the requirements of the Contract Documents subject to the following conditions:
 - a. the form of a certificate of compliance and its disposition shall be as directed by the ENGINEER;
 - b. the certificate shall be signed by the manufacturer of the materials or the manufacturer of the assembled material;
 - c. the certificate must be furnished with each material or assembly of material delivered to the work and the material or assembly of material so certified must be clearly identified in the certificate;
 - d. all materials used on the basis of a certificate of compliance may be contested at any time;
 - e. the fact that material is used on the basis of a certificate or compliance shall not relieve CONTRACTOR from the responsibility of incorporating material in the work which conforms to requirements of the Contract Documents and any such material not conforming to such compliance, whether or not in place, shall be removed and replaced at no additional cost to the OWNER; and
 - f. OWNER reserves the right to refuse to permit the use of material on the basis of a certificate of compliance.

6.3 ADJUSTING PROGRESS SCHEDULE

- A. Changes: CONTRACTOR shall submit to ENGINEER adjustments in the progress schedule which reflect the impact thereon of changes to the work.
 1. Proposed adjustments in the progress schedule that will not change the Contract Time or milestones will conform generally to the progress schedule then in effect and additionally will comply with any provisions of Paragraph 2.5. Such submittal must be accepted by ENGINEER before the adjusted schedule becomes effective.
 2. Proposed adjustments in the progress schedule that will change the Contract Time or milestones shall be submitted in accordance with the requirements of Article 12.1. Such adjustments may only be made by a Change Order in accordance with Article 3.3.
- B. Float Time: Any float time used in the progress schedule shall not be owned solely by OWNER or CONTRACTOR.
 1. Float time shall be allocated and used in the best interests of the work.
 2. CONTRACTOR's schedules shall reflect CONTRACTOR's use of float time and specify the reason for CONTRACTOR's use.
 3. The progress schedule shall reflect OWNER's use of float time.
 4. OWNER shall notify CONTRACTOR or OWNER's claim to use any float time and shall specify the reason for such use.

6.4 SUBSTITUTES OR "OR EQUAL" ITEMS

- A. Proprietary Item or Particular Supplier: Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary

item or the name of a particular supplier, such naming is intended to establish the type, function, and quality required. Unless the specification or description contains or is followed by words reading that no substitution is permitted, material and equipment or other suppliers may be accepted by ENGINEER. Review and acceptance of the “or equal” substitute item may, in ENGINEER’s sole discretion, be accomplished without compliance with some or all of the following requirements for acceptance of proposed substitute items:

1. requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR;
 2. CONTRACTOR shall first make written application to ENGINEER for acceptance of proposed substitute item of material or equipment;
 3. CONTRACTOR shall certify that the proposed substitute will function and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified;
 4. the application shall state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR’s achievement of substantial completion on time, whether or not acceptance of the substitute for use in the work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the work is subject to payment of any license fee or royalty;
 5. all variations of the proposed substitute from that specified will be identified in the application and the nature and extent of available maintenance, repair and replacement service will be indicated;
 6. the application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of separate CONTRACTORS affected by the resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute;
 7. all data to be provided by CONTRACTOR in support of any substitute item or proposed substitute item will be at CONTRACTOR’s expense; and
 8. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR’s expense additional data which ENGINEER determines to be necessary to evaluate the proposed substitute item.
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER, in ENGINEER’s sole discretion, to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in Paragraph 6.4A as applied by ENGINEER and as supplemented in Section 01 25 00 of the General Requirements in the Standard Specifications.

- C. Time Require for Review of Substitute: Proposed substitutes shall be made in ample time to permit review and written approval without delaying the work. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved shop drawing.
- D. Special Performance Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
- E. OWNER's Costs: CONTRACTOR shall reimburse OWNER for all charges or expenses incurred by OWNER regarding any request for substitution per this part whether or not such request is approved.
- F. No Extra Time for Review: CONTRACTOR's request to use substitute materials and equipment or methods per this Article and ENGINEER's review of such request shall not extend the Contract Time.

6.5 SUBCONTRACTORS, SUPPLIERS AND OTHERS

- A. General: CONTRACTOR shall not employ any subcontractor, supplier or other person or organization (including those acceptable to OWNER as indicated in Paragraph 6.5B), whether initially or as a substitute, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any subcontractor, supplier or other person or organization to furnish or perform any of the work against whom CONTRACTOR has reasonable objection.
- B. Adjustment for Substitution of Subcontractor, Suppliers and Other Person: If any subcontractor, supplier or other person or organization, which was identified by CONTRACTOR prior to the effective date of the construction contract, is to be replaced by the CONTRACTOR, or on request of the OWNER on the basis of reasonable investigation, CONTRACTOR shall propose in writing to the OWNER an acceptable subcontractor, supplier or other person or organization substitute. If OWNER's request is based upon defective work or CONTRACTOR's failure to comply with the Contract Documents, the contract price shall remain unchanged, otherwise, the contract price will be adjusted by the difference in the cost occasioned by such replacement and an appropriate Change Order signed. No acceptance by OWNER of any subcontractor, supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject defective work or any other right under the Contract Documents or under law or regulations.
- C. OWNER – CONTRACTOR – Subcontractor Relationships: CONTRACTOR shall be fully responsible to OWNER for all acts and omissions of subcontractors, suppliers and other persons and organizations performing or furnishing any of the work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for acts and omissions of CONTRACTOR's own agent or employee. Nothing in the Contract Documents shall create any contractual relationship between OWNER and any such subcontractor, supplier or other person or organization, nor shall it create any obligation on the part of OWNER to pay or to see to the payment of any moneys due any such subcontractor, supplier or other person or organization except as may otherwise be required by laws and regulations.

- D. Responsibility for Subcontractor Licensing: Proper licensing under state or local law and regulations to perform the work of a subcontract shall be the responsibility of the CONTRACTOR and the subcontractor or subcontractors involved. OWNER does not assume any responsibility for the terms and conditions of the contract between CONTRACTOR and subcontractor. OWNER's requirement that CONTRACTOR submit a subcontractor and supplier report shall not be construed as an assumption by OWNER of any responsibility for said licensing requirements or terms and conditions of subcontracts.
- E. Contract Documents Do Not Subdivide the Work: The divisions and sections of the specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the work among subcontractors or suppliers or delineating the work to be performed by any specific trade.
- F. Subcontractor Agreements: All work performed for CONTRACTOR by a subcontractor will be pursuant to an appropriate written agreement between CONTRACTOR and the subcontractor which specifically binds the subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER. If requested by OWNER, CONTRACTOR shall provide copies of such agreements to OWNER.
- G. Subcontractor or Supplier Default: When any part of the work has been subcontracted and is not being prosecuted in a manner satisfactory to ENGINEER, CONTRACTOR shall cause such failure to be corrected as required by the Construction Contract. In such a case, no additional compensation will be paid to CONTRACTOR for completing the part of the work.
- H. Conflict of Interest, Subcontractors: No agency or company which is or has been under contract to the OWNER to provide design, design reviews, soil testing, material testing, surveying and any other such functions associated with the design phase of the work shall be used as a subcontractor by the CONTRACTOR.

6.6 PATENT FEES AND ROYALTIES

- A. In General: CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the work or the incorporation in the work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for us in the performance of the work and if to the actual knowledge of the OWNER is use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents.

6.7 PERMITS

- A. In General: Unless otherwise provided in the supplementary conditions, CONTRACTOR shall obtain and pay for all permits, licenses and inspections. The CONTRACTOR shall, without additional cost to the OWNER, give all notices and pay all necessary fees (including plan check fees) in connection with the performance of the construction contract. CONTRACTOR shall furnish a copy of permits and licenses (except permanent easements) to the ENGINEER prior to CONTRACTOR commencing work thereunder.

- B. Governmental Charges and Inspection Fees: CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the work, which are applicable at the time of opening Bids, or if there are no Bids, on the effective date of the construction contract.
- C. Utility Connection Fees and Plant Investment Fees: CONTRACTOR shall pay all charges of utility OWNERS for connections to the work, and OWNER shall pay all charges of such utility OWNERS for capital costs related thereto such as plant investment fees.
- D. Temporary Utilities: CONTRACTOR shall make all arrangements for electricity, sewer, gas and telephone from the appropriate utility companies. All utility lines will be on the surface of the ground, underground or placed on temporary poles and shall conform to the appropriate load requirements. No pole shall be erected without approval of the ENGINEER. Relocation of temporary utilities shall be paid for by the CONTRACTOR at no additional cost to the OWNER.
- E. Uniform Building Code: CONTRACTOR shall arrange for all necessary inspections required by the appropriate governmental authority(ies). Before final payment is issued, CONTRACTOR shall deliver to the ENGINEER copies of all certificates of inspection.
- F. Waterworks Connections: If CONTRACTOR desires to use OWNER's water, it shall first contact ENGINEER and make arrangements therefore. CONTRACTOR shall pay all necessary charges, and usage costs.
- G. Utah Pollutant Discharge Elimination System (UPDES) Permit: An UPDES permit shall be secured by CONTRACTOR at CONTRACTOR's sole expense, if the construction site requires such a permit under Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 1953, as amended. The agency responsible for verifying permit requirement is the State of Utah Department of Environmental Quality, Division of Water Quality.
- H. Ogden City Permits: *In addition to any other permits required for the work, the CONTRACTOR shall obtain permits from Ogden City Corporation for work on the project.*
1. OWNER-Paid Permits: *CONTRACTOR shall be responsible for submitting plans, scheduling inspections and paying all costs incidental to such actions as required for any building, plumbing, mechanical, electrical, water, sewer or drainage permit required by Ogden City Corporation. Except for construction water meter fees, the fees for these permits shall be paid by the OWNER and shall not be included in CONTRACTOR's Bid. The following listed permit is not exclusive and does not relieve CONTRACTOR of the responsibility of obtaining all permits.*
 - a. *Permit for Work in the Public Way: From Ogden City's Engineering division, ENGINEER's One Stop counter, 2549 Washington Boulevard, Suite 240, Ogden City, Utah, 84401. Phone (801) 629-8986.*
 2. CONTRACTOR-Paid Permits: *The fees for permits not paid for by the OWNER shall be included in the CONTRACTOR's Bid. The following list is not exclusive and does not relieve CONTRACTOR of the responsibility of obtaining all permits:*
 - a. Construction Water: *If water for construction is required to be taken from fire hydrants or from a new water service, CONTRACTOR shall be solely*

responsible for obtaining and paying for necessary permits and water usage to Ogden City. Construction water permits to connect to a new water service can be obtained, along with a description of backflow requirements at Ogden City One Stop Counter, 2549 Washington Boulevard, Ogden City, Utah 84401. (801) 629-8985. Construction water obtained from a fire hydrant must be metered from an Ogden City hydrant meter. Meters can be rented with a deposit from Ogden City Utilities 133 W. 29th St. Ogden City, Utah 84401. (801) 629-8321. Connections made without proper backflow prevention or hydrants connected without an Ogden City hydrant meter may be subject to penalties or fines.

- b. *Building, Electrical and Plumbing Permits: From Ogden City Building Inspections office, 2549 Washington Boulevard, Suite 240, Ogden, Utah, 84401. Phone (801) 629-8985.*
- c. *Permit and Fees for Tap of Water Mains: From Ogden City One Stop Counter, 2549 Washington Boulevard, Suite 240, Ogden, Utah 84406. Phone (801) 629-8986. Ogden City Water Utility, 175 West 29th Street, Ogden, Utah. Phone (801) 629-8321.*
- d. *Permit and Fees for Tap of Sewer Mains: From Ogden City One Stop Counter, 2549 Washington Boulevard, Suite 240, Ogden, Utah, 84401 Phone (801) 629-8986.*
- e. *General Permit for Storm Water Discharge:*
 - 1. *Between 5,000 square feet and 0.99 acres:* From Ogden City One Stop Counter, 2549 Washington Boulevard, Suite 240, Ogden, Utah 84401, (801) 629-8986
 - 2. *1 acre or more:* From the State of Utah, Department of Environmental Quality, Division of Water Quality. Fee varies; contact the State for a quote.
- f. *Ogden City Business License: In addition to any other licenses required for the work, the CONTRACTOR shall obtain a business license from Ogden City Corporation for work on the project.*
 - 1. *A general CONTRACTOR who performs labor will be required to show evidence of a current Ogden City Business License, if he/she has a business in Ogden City.*
 - 2. *Only those major subcontractors, i.e. mechanical, electrical, and plumbing that are required to secure permits from the Ogden City Inspection Division will be required to secure an Ogden City Business License, if they have a business in Ogden City.*
- g. *Other Permits: All other permit fees required by Ogden City, the State of Utah, the United States of America, and any of their agencies, or by any private utility companies, shall be paid for and obtained by the CONTRACTOR and included in the CONTRACTOR's Bid. The following list is not exclusive and does not relieve CONTRACTOR of the responsibility of obtaining all permits:*
 - 1. *UDOT Digging Permit: ; State of Utah, District 1. Phone (801)620 1604/1639.*

2. Private Property OWNER Permit: Written permission to use private water.
3. Private Property OWNER Permit: Written permission to store product, equipment, materials and supplies outside of work site boundaries.
4. General Permit for Storm Water Discharge: From the State of Utah, Department of Environmental Quality, Division of Water Quality. Fee varies. Contact the State for a quote.
5. Flood Control Permit: Weber County, Department of Public Works, Engineering, Ogden City, Utah.

6.8 LAWS AND REGULATIONS

- A. CONTRACTOR shall give all notices and comply with all laws and regulations applicable to furnishing and performance of the work. Except where otherwise expressly required by applicable laws and regulations, OWNER shall not be responsible for monitoring CONTRACTOR's compliance with any laws and regulations nor the compliance of any of CONTRACTOR's agents, employees, subcontractors or suppliers.
- B. If CONTRACTOR observes that the specifications or Drawings are at variance with any laws or regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in Paragraph 3.3A. If CONTRACTOR performs any work knowing or having reason to know that it is contrary to such laws or regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising there from.

6.9 TAXES

- A. Except for OWNER-supplied material, CONTRACTOR shall pay all sales, consumer, use and other similar taxes which are required to be paid during the performance of the work in accordance with applicable laws and regulations.

6.10 USE OF PREMISES

- A. Use of Premises, Damage: CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by laws and regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the OWNER or occupant thereof, or of any such land or areas contiguous thereto, resulting from the performance of the work.
- B. Clean Work Site: During the progress of the work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the work. At the completion of each portion of the work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery,

and surplus materials, and shall leave the site clean and ready for occupancy by OWNER.

- C. Restoration of Property, Clean Neighborhood, Costs: CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents. Failure by CONTRACTOR to repair damage or disturbance or to maintain the job site, adjacent areas and haul routes in a clean and neat condition in accordance with Contract Documents will result in OWNER, after reasonable notice to CONTRACTOR, providing the equipment and labor necessary to clean up the said areas and charging the costs thereof to CONTRACTOR. "Cleanliness" requires removal of rocks, dirt and spillage.
- D. Load Safety: CONTRACTOR shall not load or permit any part of any structure at the work site to be loaded in any manner that will endanger the structure. CONTRACTOR shall not subject any part of the work or adjacent property to stresses or pressures that will endanger either of them.
- E. CONTRACTOR to Indemnify; Save OWNER Harmless: CONTRACTOR shall assume full responsibility for any damage to:
 - 1. the project site, land and areas identified in and permitted by the Contract Documents and laws and regulations, rights-of-way, permits easements; and
 - 2. other property which may be damaged by CONTRACTOR, subcontractors or suppliers during the performance of the work such as walls, utilities, streets, ways, sidewalks, curbs gutters and property of third part including other governmental agencies).

Should any claims be made against OWNER by any OWNER or occupant of any land or area damaged by CONTRACTOR, subcontractors or suppliers during performance of the work, CONTRACTOR shall promptly attempt to resolve the claim. CONTRACTOR shall indemnify and save OWNER harmless from and against all claims, damages, losses and expenses (including, but not limited to fees of ENGINEERS, architects, attorneys and other professionals and court costs arising directly, indirectly or consequentially out of a claim brought by any such other party against OWNER arising out of CONTRACTOR's performance of the work.

6.11 RECORD DOCUMENTS

- A. CONTRACTOR shall maintain in a safe place at the work site one record copy of all Contract Documents and written interpretations and clarifications (issued pursuant to Article 9.4) in good order and annotated to show all changes made during construction. These record documents, together with all acceptable samples and a counterpart of all reviewed shop Drawings, shall be available to ENGINEER for reference. Upon completion of the work, these record documents, samples and shop Drawings shall be delivered to ENGINEER for OWNER.
- B. CONTRACTOR shall maintain thorough records of all transactions and shall give the OWNER and other agencies required by law or regulation, access to and the right to examine all records, books, papers, or documents to all operations funded in whole or in part under the Construction Contract for a period of three (3) years following work completion.

6.12 SAFETY AND PROTECTION

- A. In General: CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work.
- B. Protection Against Damage, Injury, Loss:
1. CONTRACTOR's Responsibility: CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - a. all employees on the work and other persons and organizations who may be affected thereby;
 - b. all work and materials and equipment to be incorporated therein, whether in storage on or off the site except as otherwise specifically directed by OWNER, as e.g. OWNER-supplied materials, builder's risk insurance, etc.; and
 - c. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, curbs, gutters, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.
 2. Risk: Except as provided above, until substantial completion or as indicated in other Contract Documents, CONTRACTOR shall have the charge and care of the work and materials and shall bear the risk of damage, injury or loss to any part thereof by any acts of God or the elements or from any other cause. Except as provided above, OWNER, its officers, employees and agents and the ENGINEER shall not be answerable nor accountable in any manner for any damage or loss that may occur to the work or any part thereof; for any material or equipment used in performing the work; for property damage, personal injury, or death; or for damage to adjoining property from any cause whatsoever during the progress of the work or at any time before substantial completion.
- C. Repairs by CONTRACTOR: All damage, injury or loss to any property referred to in Paragraph 6.12B.1.b. or 6.12B.1.c. above, caused directly or indirectly, in whole or in part, by CONTRACTOR, any subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR at no additional cost to the OWNER.
- D. Safety, Warnings: CONTRACTOR shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. CONTRACTOR shall erect and maintain, as required by existing conditions and performance of the work, reasonable safeguards for safety, and protection, including posting danger signs and other warning against hazards, and promulgating and giving notice of safety regulations.
- E. Notification: CONTRACTOR shall notify OWNERS of adjacent property, underground facilities and separate utilities when prosecution of the work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.
- F. Temporary Repairs by OWNER: When not performed by CONTRACTOR within the time requested by ENGINEER, OWNER may make or cause to be made such temporary repairs as are necessary to restore to service any damaged facility. The

- cost of such repairs shall be borne by the CONTRACTOR and, if paid by OWNER, may be deducted from any monies due or to become due the CONTRACTOR.
- G. Safety Representative: CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's resident superintendent unless designated otherwise in writing by CONTRACTOR.
- H. Hazard Communications Standards (Employee Right to Know): During performance of the work, CONTRACTOR shall be subject to federal regulations outlined in 29CFR 1910.1200 entitled Hazard Communication Standard. CONTRACTOR shall be solely responsible for any and all violations of the hazard communication standard resulting from the negligent or intentional acts or omission or commission of officers, employees, representatives, agents, servant, subcontractors, suppliers, successors and assigns of CONTRACTOR. CONTRACTOR and subcontractor personnel required under the terms of the Contract Documents to work with or in close proximity to hazardous materials and hazardous wastes shall have completed and be current with the personal training required by Occupational Health and Safety Administration (OSHA) regulations as outlined in 29CFR 1910.1200. CONTRACTOR and subcontractor personnel required under the terms of the Contract Documents to work with hazardous materials or hazardous wastes, or perform services in an area identified as a hazardous material or hazardous waste remediation site, shall have completed and be current with the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) training program as outlined in 29CFR 1910.120.
- I. Encountering Hazardous Substances: In the event the CONTRACTOR encounters on the site substance reasonably believed to be asbestos or polychlorinated biphenyl (PCB) or any other hazardous waste or substance which may endanger the health of those persons performing the work or being on the site, which has not been rendered harmless, the CONTRACTOR shall immediately stop work in the area affected and immediately report the condition to the ENGINEER and OWNER, and confirm the report immediately in writing. The OWNER shall retain a special consultant qualified to investigate, evaluate and mitigate any potentially hazardous substances. The work in the affected area shall be resumed in the absence of asbestos, polychlorinated biphenyl (PCB) or said hazardous waste or substance, or when it has been rendered harmless according to the federal and state health standards. Except to the extent provided otherwise in the Contract Documents, the CONTRACTOR shall not be required to perform, without consent, any work relating to asbestos, polychlorinated biphenyl (PCB) or any other hazardous waste substance. In the event of OWNER's delay in investigating, evaluating and mitigating any potentially hazardous substances, if CONTRACTOR believes that any delay entitles CONTRACTOR to an increase in the contract price or an extension of the Contract Time, CONTRACTOR may make a claim therefore as provided in Parts 11 and 12 hereof.
- J. Using Hazardous Substances: When use or storage of explosives or other hazardous substances or construction equipment or unusual methods are necessary for execution of the work, the CONTRACTOR shall notify OWNER in writing of where and when

such will be used and shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

- K. Cost to Protect or Repair in Contract Price: The full cost of furnishing all labor, materials, tools equipment and incidentals, and for doing all the work involved in protecting or repairing property and for insuring against risk of loss or damage shall be deemed included in the Contract Price and no additional compensation shall be allowed therefore.

6.13 EMERGENCIES

- A. CONTRACTOR to Act: In emergencies affecting the safety or protection of persons, the work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER, shall prevent threatened damage, injury or loss.
- B. Written Notice: CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the work or variations from the Contract Documents have been caused by responding to such an emergency.
- C. Change Order: If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Change Order will be issued to document the consequences of such actions.

6.14 SHOP DRAWINGS AND SAMPLES

- A. Not Contract Document: Shop Drawings, product data, samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate, for those portions of the work for which submittals are required, the way the CONTRACTOR proposes to conform to the information given and the design concept expressed by the Contract Documents.
- B. Shop Drawings: CONTRACTOR shall submit shop drawing to ENGINEER for review and acceptance in accordance with the accepted schedule for submissions (see Paragraph 2.7A), or for other appropriate action if so indicated in the supplementary conditions.
 - 1. Before submission, CONTRACTOR shall check and verify all field measurements and comply with applicable procedures specified in the General Requirements.
 - 2. All submissions will be identified as ENGINEER may require, and will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to CONTRACTOR's review of the submission, including those of CONTRACTOR's subcontractors.
 - 3. The data shown on the shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.
- C. Samples: CONTRACTOR shall also submit to ENGINEER for review with such promptness as to cause no delay in work, all samples required by the Contract Documents.
 - 1. All samples, whether supplied by CONTRACTOR, or CONTRACTOR's subcontractors, or CONTRACTOR's suppliers shall be checked by the CONTRACTOR. Such samples shall be accompanied by a specific written

annotation indicating that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to CONTRACTOR's review of the sample.

2. All submissions will be identified clearly as to material and supplier.
 3. Pertinent data such as catalog numbers and the use for which intended shall be indicated.
- D. Verifications: Before submission of each shop drawing or sample, CONTRACTOR shall have determined and verified the following:
1. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto;
 2. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the work; and
 3. all information relative to CONTRACTOR's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.
- E. Notice of Variance: At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the shop Drawings or samples may have from the requirements of the Contract Documents. In addition, CONTRACTOR shall cause a specific notation to be made on each shop drawing submitted to ENGINEER for review and approval of each such variation. CONTRACTOR shall direct specific attention in writing to CONTRACTOR's or other's revisions other than the corrections called for by ENGINEER on previous submittals.
- F. Review by ENGINEER: ENGINEER will review with reasonable promptness shop Drawings and samples. ENGINEER's review will be only for conformance with the design concept of the project and for compliance with the information given in the Contract Documents. ENGINEER's review shall not extend to means, methods, techniques, sequences or procedures or construction (except where a specific means, method, technique, sequence or procedure or construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of shop Drawings and submit as required new samples for review.
- G. Accuracy of Dimensions, Errors and Omissions: ENGINEER's review of shop Drawings or samples shall not relieve CONTRACTOR from responsibility for accuracy of dimensions and details or any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission, as required by Paragraph 6.14E, and ENGINEER has reviewed each such variation and given specific written notation thereof incorporated in or accompanying the shop drawing or sample submittal. Such review by ENGINEER will not relieve CONTRACTOR from responsibility for errors or omissions in the shop Drawings or from responsibility for having complied with the provisions of Paragraph 6.14D above.

- H. Distribution of Drawings: The CONTRACTOR shall furnish prints of final shop Drawings, erection Drawings, equipment layouts, and other data to CONTRACTOR's subcontractors and suppliers for the proper coordination of their work. CONTRACTOR shall keep 1 complete set of the approved documents with the record documents on the premises at all times.
- I. Compensation: Full compensation for furnishing all shop Drawings and samples shall be considered as included in the prices paid for the items of work to which such Drawings relate and no additional compensation will be allowed therefore.
- J. Work Performed Before ENGINEER's Review: Where a shop drawing or sample is required by the specifications, any related work performed by CONTRACTOR, prior to ENGINEER's review of the pertinent submission will be at CONTRACTOR's sole risk of non-acceptance. Correction of non-acceptable work shall be at CONTRACTOR's expense.
- K. Rejection: No extra Contract Time shall be given for rejection of shop Drawings or samples.
- L. Certificate of Compliance: The ENGINEER may permit the use of certain materials or assembly prior to sampling and testing if accompanied with a certificate of compliance stating that materials involved comply in all respects with the requirements of the Contract Documents. The certificate shall be signed by the manufacturer of the materials or the manufacturer of the assembled material. The certificate of compliance must be furnished with each line of material delivered to the work and the line so certified must be clearly identified in the certificate. All materials used on the basis of a certificate of compliance may be contested by ENGINEER at any time. The fact that material is used on the basis of a certificate of compliance shall not relieve CONTRACTOR from the responsibility of incorporating material in the work which conforms to requirements of the Contract Documents and any material not conforming, whether or not in place, shall be removed and replaced at the CONTRACTOR's expense. OWNER reserves the right to refuse to permit the use of material on the basis of a certificate of compliance. The form of a certificate of compliance and its disposition shall be as ordered by the ENGINEER.

6.15 CONTINUING THE WORK

- A. During Disputes or Disagreements: CONTRACTOR shall carry on the work and adhere to the progress schedule during all disputes or disagreements with OWNER. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as CONTRACTOR and OWNER may otherwise agree in writing.
- B. No Damage for Delay:
 - 1. *In all cases where CONTRACTOR is delayed, hindered, or obstructed in the execution of the work, or any part thereof, for any reason whatsoever, the CONTRACTOR shall not be entitled to claim or recover any damages or additional payment from the OWNER or ENGINEER. It is, however, the intent of this contract that in all cases where the CONTRACTOR is substantially delayed, hindered, or obstructed in the execution of the work through no fault of the CONTRACTOR and because of conditions beyond the CONTRACTOR's control, the Contract Time shall be extended by change order by such amount as*

conditions, in the judgment of the ENGINEER, justify, and such extension of Contract Time shall be the exclusive remedy of the CONTRACTOR.

2. *Claims relating to time shall be made in accordance with the applications provisions of Article 12.1. CONTRACTOR's plea that insufficient time was specified is not a valid reason for extension of Contract Time. Contract time shall not be extended for any weather-related delays.*
3. *Permitting the CONTRACTOR to continue and finish the work or any part of it after the time fixed for its completion, or after that date to which the time may have been extended, will in no way operate as a waiver on the part of the OWNER of any of its rights under the contract.*

6.16 CONTRACTOR'S GENERAL WARRANTY AND GUARANTEE

- A. Defects or Damage Exclusion: CONTRACTOR warrants and guarantees to OWNER that all work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:
 1. Abuse, modification or improper maintenance or operation by persons other than CONTRACTOR, subcontractors or suppliers; or
 2. Normal wear and tear under normal usage.
- B. CONTRACTOR's Continuing Obligation: CONTRACTOR's obligation to perform and complete the work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the work in accordance with the Contract Documents:
 1. observations by ENGINEER;
 2. recommendation of any progress or final payment by ENGINEER;
 3. the issuance of a certificate of substantial completion or any payment by OWNER to CONTRACTOR under the Contract Documents;
 4. use or occupancy of the work or any part thereof by OWNER;
 5. any acceptance by OWNER or any failure to do so;
 6. any review and approval of a shop drawing, sample or product data submittal or the issuance of a notice of acceptability by ENGINEER;
 7. any Inspection, test or approval by others; or
 8. any correction of defective work by OWNER.
- C. Acceptance is Not a Waiver of OWNER's Rights: OWNER's acceptance of defective work shall not release or relive CONTRACTOR from warranty and guarantee provisions of this article.
- D. Survival of Obligations: All representations, indemnifications, warranties and guaranties made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the work and termination or completion of the Agreement.

6.17 INDEMNIFICATION

- A. Indemnification of OWNER: CONTRACTOR shall indemnify, *defend*, and hold harmless OWNER and ENGINEER, *and their elected officials, officers, agents,*

- employees and volunteers* from and against any and all claims, damages, losses and expenses, direct, indirect or consequential (including, but not limited to, fees and charges of ENGINEERS, architects, attorneys and other professionals and court costs) arising out of or resulting from the negligent acts or omissions in performance of the work by CONTRACTOR, any subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the work or anyone for whose acts any of them may be liable, regardless of whether or not the claim, damage, loss, etc. arising from the act or omission is caused in part by a party indemnified hereunder or arises by or is imposed by law and regulations regardless of the negligence of any such party.
- B. Indemnification Not Limited: In any claims against OWNER or ENGINEER or any of their *elected officials, officers, agents, employees or volunteers* by any employees of CONTRACTOR, any subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the work or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.17.A shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such subcontractor or other person or organization under worker's compensation acts, disability benefit acts or other employee benefit acts.
- C. Liability of ENGINEER, etc.: The obligations of CONTRACTOR under Paragraph 6.17A shall not extend to the liability of ENGINEER, OWNER's consultants, agents or employees arising out of the preparation or approval of maps, Drawings, opinions, reports, surveys, Change Orders, designs or specifications.
- D. CONTRACTOR to Save OWNER Harmless: CONTRACTOR shall assume the OWNER's defense, and save OWNER harmless from any claims directly or indirectly arising from CONTRACTOR's use or alleged use of patented or trademarked materials, design, equipment, devices, product or processes on or ultimately successful. In the event of such claims:
1. OWNER shall promptly notify CONTRACTOR and CONTRACTOR shall defend against such claims, in OWNER's name, but at CONTRACTOR's expense;
 2. OWNER shall have the right to be represented by counsel, but such representations shall be at the OWNER's own expense; and
 3. at the request and expense of CONTRACTOR, the OWNER shall actively cooperate and assist CONTRACTOR to the fullest extent in the defense of any such proceedings.

In the event that CONTRACTOR shall fail to defend against any such claims, the OWNER may, in addition to any other legal remedies which the OWNER might have, at OWNER's election, defend such suit and be reimbursed by CONTRACTOR of all reasonable expenses (including attorney's fees) incurred by the OWNER in this connection, and CONTRACTOR shall pay all damages and costs awarded or otherwise suffered by OWNER in any such claim against OWNER.

6.18 HAZARDOUS WASTE GENERATION

- A. In General: The CONTRACTOR shall be responsible for ensuring that all services the CONTRACTOR and its subcontractors are required to provide under the terms of

the Contract Documents are performed in accordance with applicable federal, state and local environmental regulations and within generally accepted professional performance standards for the services to be provided.

- B. Hazardous Wastes Generated by CONTRACTOR: The CONTRACTOR shall be responsible for the interim handling, evaluation and disposal of any hazardous materials and hazardous wastes generated by the CONTRACTOR or any of its subcontractors during the performance of any services under the terms of the Contract Documents, and shall ensure that handling, evaluation and final disposal of all hazardous materials and hazardous wastes are performed in accordance with the requirements outlined in 40 CFR Parts 261 and 262 and Utah Administrative Code R-450-5.
1. The CONTRACTOR shall notify the ENGINEER immediately upon discovery that the CONTRACTOR or its subcontractors has generated a hazardous waste material. If the hazardous waste material was generated as the result of a hazardous material spill, the CONTRACTOR shall be responsible for completing spill reporting requirements for all applicable environmental regulatory programs.
 2. The CONTRACTOR shall also provide the ENGINEER with documentation within eight (8) hours of the discovery indicating:
 - a. the date of waste generation;
 - b. specific waste classification or characterization;
 - c. waste quantity;
 - d. waste profile and acceptance identifying the intended disposal facility; and
 - e. copies of all Uniform Hazardous Waste Manifest documenting off-site transportation and disposal activities.
 3. CONTRACTOR shall contain hazardous material and protect workers and the public from exposure.
- C. Hazardous Wastes Generated by OWNER: The CONTRACTOR shall ensure that any services the CONTRACTOR or its subcontractors perform under the terms of the Contract Documents that involve the interim handling, evaluation and disposal of any hazardous materials and hazardous waste generated by, or the responsibility of the OWNER, shall be performed in accordance with the requirements outlined in 40 CFR Parts 261 and 262 and Utah Administrative Code R-450-5.
1. The CONTRACTOR shall also provide the ENGINEER with documentation indicating:
 - a. the date of waste generation;
 - b. specific waste classification or characterization;
 - c. waste quantity;
 - d. waste profile and acceptance identifying the intended disposal facility; and
 - e. copies of all Uniform Hazardous Waste Manifest documenting off-site transportation and disposal activities.
 2. If handling of hazardous wastes generated by OWNER is not indicated in the Contract Documents, such cost of handling shall be determined as indicated in Article 11.3.
- D. Final Disposal of Hazardous Materials and Hazardous Wastes: CONTRACTOR shall be responsible for ensuring that all hazardous materials and hazardous wastes, identified as subject to the provisions of Paragraphs 6.17A, B and C above, regardless

of generator, be submitted to a facility or facilities permitted and qualified to recycle, process, or perform final disposal as required for the type of hazardous material or hazardous waste being submitted.

- E. Documentation: CONTRACTOR shall provide OWNER with documentation of appropriate disposal.

PART 7 OTHER WORK

7.1 RELATED WORK AT SITE

- A. Owners of Utilities and Franchises to Enter upon the Premises: The right is reserved to the owners of utilities and franchises to enter upon the premises for the purposes of making repairs or changes of their property that may become necessary by the work.
- B. Separate Work: OWNER may perform other work related to the project at the site by OWNER's own forces, or let other direct contracts therefore which shall contain general conditions similar to these, or have other work performed by utility owners. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work. If CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR or requires additional time and the parties are unable to agree as to the extent thereof, CONTRACTOR may make a claim therefore as provided in Parts 11 and 12.
- C. Access to Site: CONTRACTOR shall coordinate all phases of the work and afford each utility owner and other CONTRACTOR who is a party to such a contract (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the work with theirs.
- D. Cutting, Fitting and Patching: CONTRACTOR shall do all cutting, fitting and patching of the work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected.
- E. Delays Caused by Other Work, Defects or Deficiencies in Other Work: If the proper execution or results of any part of CONTRACTOR's work depends upon work performed by others under this Part 7, CONTRACTOR shall inspect and promptly report to ENGINEER in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure so to report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's work except for latent or non-apparent defects and deficiencies in the other work.

7.2 COORDINATION

- A. Coordinating Agent, Identified in Supplementary Conditions: If OWNER contracts with others for the performance of other work on the project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime CONTRACTORS will be identified in the

supplementary conditions. The specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided in the supplementary conditions, OWNER shall have sole authority and responsibility in respect of such coordination.

- B. Ceasing Work Temporarily: If other CONTRACTORS under separate OWNER contracts are unable to join their work in a manner acceptable to all, ENGINEER will decide if CONTRACTOR or other CONTRACTORS shall cease work temporarily. Should CONTRACTOR be adversely affected by the work of other CONTRACTORS, additional compensation or project completion time will be granted provided the delays or interference are not the results of the CONTRACTOR's own actions or inactions. The OWNER also reserves the right to deduct from sums of money due the CONTRACTOR for all costs incurred by the OWNER which are the result of the CONTRACTOR not properly coordinating work.

7.3 UTILITY ARRANGEMENTS

- A. Should CONTRACTOR desire a rearrangement made in any utility facility for CONTRACTOR's convenience in order to facilitate construction operations, which is an addition to or different from the arrangements indicated on the Drawings or in the specifications, CONTRACTOR shall make such arrangements as are necessary with the utility and bear all expenses in connection therewith.

7.4 WORK DONE BEYOND THE SITE

- A. Any work done beyond the limits shown on the Drawings or established in writing by ENGINEER, will be considered as unauthorized and no payment will be made therefore.

PART 8 OWNER'S RESPONSIBILITIES

8.1 OWNER'S RESPONSIBILITIES

- A. Communications: OWNER shall issue all communications to CONTRACTOR through ENGINEER as per Article 2.8.
- B. Tests and Observations: OWNER's responsibility in respect of certain Inspections, tests and observations is set forth in Article 13.3.
- C. Work Suspension: In connection with OWNER's right to stop work or suspend work, see Article 15.1. Article 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.
- D. Furnishing Data: OWNER shall promptly furnish the data required of OWNER under the Contract Documents.
- E. Prompt Payment: OWNER shall promptly make payments to CONTRACTOR after they are due as provided in Paragraphs 14.4 and 14.9.

PART 9 ENGINEER'S STATUS DURING CONSTRUCTION

9.1 OWNER'S REPRESENTATIVE

- A. General: ENGINEER will be OWNER's representative and agent during the Contract Time, until final payment is due and, with the OWNER's concurrence, from time to time during the correction period described in Article 13.7.

- B. Limitations: ENGINEER shall have the authority to act on behalf of the OWNER only to the extent provided in the Contract Documents.
- C. Changing Representative: ENGINEER may be changed by the OWNER upon written notice to the CONTRACTOR.

9.2 PROJECT REPRESENTATIVE

- A. ENGINEER may furnish a resident project representative and such other assistants as ENGINEER deems necessary to observe that the materials to be furnished and the work done strictly conforms to the Contract Documents.

9.3 AUTHORITY AND DUTIES OF RESIDENT PROJECT REPRESENTATIVE

- A. General: The resident project representative:
 - 1. shall be permitted to observe all work done and all material furnished. Such observation may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used;
 - 2. is not authorized to revoke, alter, or waive any requirement of the Contract Documents;
 - 3. is authorized to call the attention of CONTRACTOR to any failure of the work or materials to conform to the Contract Documents;
 - 4. shall have authority to reject materials and suspend all or any part of the work until any question at issue can be referred to and decided by the ENGINEER; and
 - 5. shall in no case act or be considered as CONTRACTOR's foreman or perform duties for CONTRACTOR.
- B. Limitations: Any advice that the resident project representative may give the CONTRACTOR, other than set forth in Paragraph 9.3A above, shall not be binding upon the ENGINEER or OWNER. Nor shall such advice release or relieve CONTRACTOR of compliance with the Contract Documents.
- C. Suspension of Work: If work is to be suspended; the resident project representative shall issue a written order giving the reason for shutting down the work. In the absence of such written order, CONTRACTOR shall not deem the work to be suspended. After placing the order in the hands of the CONTRACTOR's agent in charge at the site, any work done thereafter may not be accepted, at ENGINEER's discretion.

9.4 CLARIFICATIONS AND INTERPRETATIONS

- A. Should it appear that the work or any of the matters relative thereto are not sufficiently detailed or explained in the Contract Documents, the CONTRACTOR shall request the ENGINEER to provide such further explanations as may be necessary for CONTRACTOR. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary. These shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. CONTRACTOR shall conform to such explanations as part of the work.
- B. Any order or instruction given to the CONTRACTOR by the ENGINEER shall either be given or confirmed in writing. However, the ENGINEER's failure to put such an

order or instruction in writing shall not relieve the CONTRACTOR of CONTRACTOR's responsibility to comply with the terms and conditions of the Contract Documents.

- C. If CONTRACTOR disputes ENGINEER's explanation or interpretation of the requirements of the Contract Documents, CONTRACTOR may request dispute resolution as specified in Part 16.

9.5 AUTHORIZED VARIATIONS IN WORK

- A. ENGINEER may authorize minor variations in the work from the requirements of the Contract Documents which do not involve an adjustment in the contract price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a work directive change. If CONTRACTOR believes that an increase in the contract price or an extension of the Contract Time is justified, and the OWNER and the CONTRACTOR are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Part 11 or 12.

9.6 REJECTING DEFECTIVE WORK

- A. ENGINEER has the authority to reject work which ENGINEER believes to be defective or that ENGINEER believes will not produce a completed project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed project as a functioning whole as indicated by the Contract Documents. ENGINEER also has the authority to require special Inspection or testing of the work, whether or not the work is fabricated, installed or completed. The failure of the ENGINEER to reject such work shall not release or relieve CONTRACTOR from conformance to the contract document requirements.

9.7 NOTICE OF INTENTION TO APPEAL

- A. ENGINEER will determine the actual quantities and classifications of unit price work performed by CONTRACTOR and will review with CONTRACTOR any preliminary determinations on such matters before rendering a written decision. ENGINEER's written decision will be final and binding upon CONTRACTOR, unless, within 10 days after the receipt of any such decision CONTRACTOR delivers to ENGINEER written notice of intention to appeal such a decision. Such an appeal may be taken in accordance with the provisions of Part 16 of these general conditions and applicable laws and regulations, but during any such appeal, CONTRACTOR shall carry on the work and adhere to the progress schedule as provided in Article 6.15.

9.8 DECISIONS ON DISPUTES

- A. Interpretation of Contract Documents: ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder. Claims or disputes concerning a question of fact or other matters relating to the acceptability of the work, the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the work or claims under Parts 11 and 12 in respect of changes in the contract price or Contract

Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph. ENGINEER will render decision in writing within 3 days of submission of the request for decision. Failure by ENGINEER to respond within said time shall be deemed a denial of CONTRACTOR's request for relief.

- B. Time for Notice of Dispute: CONTRACTOR shall submit written notice of each claim or dispute to ENGINEER promptly after occurrence of the event(s) giving rise thereto, but in no case shall said notice be delivered later than 30 days after said occurrence. Failure to submit said notice within said 30 days shall be deemed a waiver thereof by CONTRACTOR. CONTRACTOR shall also submit all written supporting data to ENGINEER within 60 days after said occurrence unless ENGINEER allows an additional period of time.
- C. Effect of ENGINEER's Decision: ENGINEER's decision concerning such claim or dispute (except any which have been waived by the making or acceptance of final payment as provided in Paragraph 14.9) will be the final expression of OWNER's position on said claim or dispute. Further, said decision shall be a condition precedent to any exercise by OWNER or CONTRACTOR of any rights or remedies as either may have under the Contract Documents or by law in respect of any such claim or dispute. ENGINEER's decision as to any allowable deviations shall be final and binding on CONTRACTOR.

9.9 LIMITATIONS ON ENGINEER'S RESPONSIBILITIES

- A. ENGINEER Not CONTRACTOR's Agent: Neither ENGINEER, ENGINEER's representative or OWNER shall act nor be considered as the CONTRACTOR's, subcontractor's, supplier's or surety's superintendent, foreman or part of their work force in any manner or form not shall they perform work or duties of the CONTRACTOR.
- B. Evaluate the Work for Contract Compliance: Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory", or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the work for compliance with Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective does not assign to ENGINEER or OWNER any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the provisions of Paragraphs 9.9C or 9.9D. Neither ENGINEER's taking or failing to take such actions or make any such reviews shall release or relieve the CONTRACTOR from CONTRACTOR's responsibility to comply with the contract document requirements.
- C. Not Responsible for CONTRACTOR's Construction Operations: Neither the ENGINEER nor the OWNER will be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. ENGINEER and OWNER will not be responsible for CONTRACTOR's failure to perform or furnish the work in

- accordance with the Contract Documents. Any advice which ENGINEER may give the CONTRACTOR, other than as set forth in Paragraph 9.3A above, shall not be binding in any way upon the ENGINEER or the OWNER. Such instruction or statement shall not release or relieve the CONTRACTOR from compliance with all of the terms and conditions of the Contract Documents.
- D. Not Responsible for CONTRACTOR's Acts or Omissions: ENGINEER and OWNER will not be responsible for the acts or omissions of CONTRACTOR or of any subcontractor, any supplier, or of any other person or organization performing or furnishing any of the work.
 - E. Intimidation of ENGINEER: ENGINEER or ENGINEER's representatives shall at all times be free to perform ENGINEER's duties without any intimidation. At ENGINEER's request, the CONTRACTOR shall remove from the work any employee causing such intimidation. Failure to do so shall be sufficient reason for ENGINEER to recommend to OWNER and for the OWNER's cancellation or termination of the construction contract.

PART 10 CHANGES IN THE WORK

10.1 ADDITIONS, DELETIONS, REVISIONS

- A. Modifications: Without invalidating the construction contract and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the work. These will be authorized by a work directive change or a Change Order.
- B. Work Directive Change: Work directive changes shall be issued by the ENGINEER. If the contract price or Contract Time are affected by a work directive change, the work specified in the work directive change shall be incorporated in a subsequently issued Change Order following negotiations by the CONTRACTOR and ENGINEER as to its effect on the contract price and Contract Time. During disputes or disagreements with the OWNER or ENGINEER regarding a work directive change, the CONTRACTOR shall promptly proceed with the work described in the work directive change as indicated in Article 6.15.
- C. Change Order: OWNER and CONTRACTOR shall execute appropriate Change Orders covering changes in the work, contract price or Contract Time which are agreed to by the parties. *Any Change Order request shall be submitted using the form in "Exhibit B"*
- D. Drawings: Drawings accompanying work directive changes and Change Orders shall be deemed a part of such documents.
- E. Payment: It is understood and agreed by the OWNER and CONTRACTOR that no money will be paid to the CONTRACTOR for any new or additional labor, materials or equipment furnished, unless a Change Order for such has been made in writing and executed by the OWNER and CONTRACTOR.

10.2 WORK NOT REQUIRED BY CONTRACT DOCUMENTS

- A. CONTRACTOR shall not be entitled to an increase in the contract price or an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified and supplemented as

provided in Article 3.3 except in the case of an emergency as provided in Article 6.13 and except in the case of uncovering work as provided in Paragraph 13.5B.

10.3 NOTICE TO SURETY

- A. If notice of any change affecting the general scope of the work or the provisions of the Contract Documents (including, but not limited to contract price or Contract Time) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable bond will be adjusted accordingly.

PART 11 CHANGE OF CONTRACT PRICE

11.1 CONTRACT PRICE

- A. The contract price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at CONTRACTOR's expense without change in the contract price.

11.2 CONTRACT PRICE ADJUSTMENT

- A. In General: The contract price may only be changed by Change Order. No claim for an adjustment on the contract price will be considered or paid if not submitted in accordance with the requirements of this Article 11.2.
- B. Written Notice: Any claim for an increase or decrease in the contract price shall be based on written notice. Notice shall be promptly delivered by the party making the claim to the other party (but in no event later than 30 days) after the occurrence of the event giving rise to the claim. The notice shall state the general nature of the claim.
- C. Deadline for Claim Submittal: A complete detailed statement of the amount and nature of the claim, with all necessary supporting data shall be delivered within 60 days after such occurrence. ENGINEER may allow an additional period of time to ascertain more accurate data in support of the claim.
- D. Notice Required: Failure to submit the notice, and detailed statement referenced above shall bar Claimant from pursuing said claim in any other forum, judicial or administrative.
- E. Acknowledgement: The notice shall be accompanied by Claimant's written statement that the amount claimed covers all known cost amounts (direct, indirect and consequential costs, including without limitation, delay costs, third party costs, lost profits and any other costs) to which the Claimant is entitled as a result of the occurrence of said event.
- F. All Claims Determined by ENGINEER: All claims for adjustment in the contract price shall be determined by ENGINEER in accordance with Paragraph 9.8A if OWNER and CONTRACTOR cannot otherwise agree.

11.3 DETERMINING CONTRACT PRICE ADJUSTMENT

- A. The value of any work covered by a Change Order or of any claim for an increase or decrease in the contract price shall be determined by ENGINEER in one of the following ways:
1. Unit Prices: Where the work involved is covered by unit prices contained in the Contract Documents, the contract price change will be recalculated by application of unit prices to the quantities of the items involved (subject to the provisions of Article 11.7).
 2. Lump Sum Price:
 - a. Contract Price Increases: the CONTRACTOR and OWNER may mutually accept a stipulated sum (which may include an allowance for overhead and profit not necessarily in accordance with Article 11.5).
 - b. Contract Price Decreases: The amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in the contract price will be the net amount of the decrease plus a deduction in CONTRACTOR's fee. The deduction in the CONTRACTOR's fee shall be 10 percent of the net amount of the decrease.
 3. Force Account (Cost of the Work Plus CONTRACTOR's Fee): If the cost of unit price work cannot be calculated or the cost of lump sum work cannot be agreed to, contract price adjustment shall be calculated on the basis of the cost of the work (determined as provided in Article 11.4) plus a CONTRACTOR's fee for overhead and profit (determined as provided in Article 11.5).

11.4 COST OF THE WORK

- A. Cost of the Work Includes: Except as otherwise agreed to in writing with OWNER, the Cost of the Work (1) shall be in amounts no higher than those prevailing in the locality of the project, (2) shall not include any of the costs itemized in Paragraph 11.4B, and (3) shall include only the following items:
1. Certified Payroll Costs: Certified payroll costs for employees in the direct employ of CONTRACTOR in the performance of the work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the work shall be apportioned on the basis of their time spent on the work. Payroll costs shall include salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. These expenses of performing work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above only to the extent such work was authorized by OWNER.
 2. Cost of All Materials and Equipment: Cost of all materials and equipment furnished and incorporated in the work, including costs of transportation and storage thereof, and suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and

all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

3. Payments Made by CONTRACTOR to Subcontractors: If required by ENGINEER, CONTRACTOR shall obtain competitive Bids from subcontractors acceptable to CONTRACTOR and shall deliver such Bids to ENGINEER who will then determine, which Bids will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of cost of the work plus a fee, the subcontractor's cost of the work shall be determined in the same manner as CONTRACTOR's cost of the work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.
4. Costs of Special Consultants: Costs of special consultants (including, but not limited to, ENGINEERS, architects, testing laboratories, surveyors and accountants) employed for services specifically related to the work.
5. Supplemental costs: Supplemental costs include the following:
 - a. Expenses of Employees: The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees reasonably incurred in discharge of duties connected with the work, except the following:
 - 1) costs for commute between residence and the work site;
 - 2) meals taken at locations within commuting distance of the work site; and
 - 3) clothing.
 - b. Consumable Products and Equipment: cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the work, and cost, less the difference in market value, of items used but not consumed which remain the property of CONTRACTOR.
 - c. Depreciation: cost, less the difference in market value, of items used but not consumed which remain the property of CONTRACTOR.
 - d. Rentals: Rentals of all construction equipment and machinery and the parts thereof, whether rented from CONTRACTOR or others, in accordance with rental agreements approved by ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the work.
 - e. Sales, Consumer, Use or Similar Taxes: Sales, consumer, use or similar taxes related to the work, and for which CONTRACTOR is liable, imposed by laws and regulations.
 - f. Royalty Payments, Fees for Permits and Licenses, Deposits: royalty payments, fees for permits and licenses, and deposits lost for causes other than negligence of CONTRACTOR, any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable.

- g. The Cost of Utilities: The cost of utilities, fuel and sanitary facilities at the site in connection with the work.
 - h. Minor Expenses: Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, express delivery and similar petty cash items in connection with the work.
 - i. Additional Bonds and Insurance: Cost of premiums for additional Bonds and insurance required solely because of changes in the work and premiums for property insurance coverage.
- B. Cost of Work Does Not Include: The term “Cost of the Work” shall not include overhead or general expense costs including, but not limited to, the following:
- 1. Payroll Costs and Other Compensation: Payroll costs and other compensation of CONTRACTOR’s officers, employees and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR’s principal or a branch office for general administration of the work and not specifically included I the agreed upon schedule or job classifications referred to in Paragraph 11.4A.1. or specifically covered by Paragraph 11.4A.4.
 - 2. Principal and Branch Offices: Expenses of CONTRACTOR’s principal and branch offices other than CONTRACTOR’s office at the site.
 - 3. Capital Expenses: Any part of CONTRACTOR’s capital expenses, including interest on CONTRACTOR’s capital employed for the work and charges against CONTRACTOR for delinquent payments.
 - 4. General Bonds and General Insurance: Cost of premiums for Bonds and insurance not directly related to the work, whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by Paragraph 11.4A.5.i. above).
 - 5. Negligence: Costs due to the negligence of CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including, but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property of payments for personal injury or death.
 - 6. Other Expenses: Other overhead or general expense cost of any kind and the costs of any item not specifically and expressly included in Paragraph 11.4A.
 - 7. Dispute Costs: Cost of court fees, attorneys or experts retained for presenting evidence pertaining to any dispute with OWNER and ENGINEER concerning CONTRACTOR’s cost of work.
- C. Documentation Supporting Cost of the Work: Whenever the cost of any work is to be determined, CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.
- 1. Reports by subcontractors or others shall be submitted through the CONTRACTOR. In the event of irreconcilable disagreement, pertinent notes shall be entered on the daily reports by each party to explain points which cannot be resolved immediately.
 - 2. For work covered by force account at the close of each working day, the CONTRACTOR shall submit such daily report to the ENGINEER together with applicable delivery tickets listing all labor, materials and equipment involving the force account work for that day. Failure to submit the daily report by the close of

the next working day will waive any rights for that day. The report shall be signed by CONTRACTOR and ENGINEER.

11.5 CONTRACTOR'S FEE

- A. Allowable Fee: The CONTRACTOR's fee allowed for overhead and profit shall be determined as follows:
1. A mutually acceptable fixed fee; or,
 2. If no acceptable fixed fee can be agreed upon, a fee based on the following percentages of the various portions of the cost of the work:
 - a. For costs incurred under Paragraphs 11.4A.1. and 11.4A.2., the CONTRACTOR's fee shall be 15 percent;
 - b. For costs incurred under Paragraph 11.4A.3., the CONTRACTOR's fee shall be five (5) percent.
 - c. If a subcontract is on the basis of the cost of the work plus a fee, and no fixed fee is agreed upon, the maximum allowable to the subcontractor who actually performs or furnished the work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such subcontractor under Paragraphs 11.4A.1., and 11.4A.2., and that any higher tier subcontractor and CONTRACTOR will each be paid a fee of five (5) percent of the amount paid to the next lower tier subcontractor.
 - d. No fee shall be payable on the basis of costs itemized under Paragraphs 11.4A.4., 11.4A.5., and 11.4B.
- B. Adjustment to CONTRACTOR's Fee: When both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.5A.2.a. through 11.5A.2.c., inclusive.
- C. Allowable Credit: the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual decrease plus a deduction in CONTRACTOR's fee by an amount equal to the equivalent amount authorized under Paragraph 11.5A above.

11.6 CASH ALLOWANCES

- A. In General: Cash allowances, if indicated in the Contract Documents, are provided for the payment of fees or the purchase and installation of products, the cost of which is to be determined upon performance of the work. It is understood that CONTRACTOR has included in the contract price all allowances so named in the Contract Documents. CONTRACTOR shall cause the work so covered, to be done for such sums within the limit of the allowances as may be acceptable to ENGINEER.
- B. Allowances Include: CONTRACTOR agrees:
1. that the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and
 2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the contract price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

- C. Allowances Payment: Prior to final payment, an appropriate Change Order shall be issued to reflect actual amounts due the CONTRACTOR on account of work covered by allowances, and the contract price shall be correspondingly adjusted.

11.7 UNIT PRICE WORK

A. Contract Price:

1. Initial Contract Price: Where the Contract Documents provide that all or part of the work is to be unit price work, the contract price shall initially include, for all unit price work an amount equal to the sum of the established unit prices for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of unit price work are not guaranteed. They are solely for the purpose of comparing Bids and determining an initial contract price.
2. Actual Contract Price: The actual contract price shall be established when CONTRACTOR accepts final payment from OWNER. Determinations of the actual quantities and classifications of unit price work performed by CONTRACTOR will be made by ENGINEER in accordance with Article 9.7.

- B. Overhead and Profit: Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item and no additional payment for overhead or profit will be claimed or paid.

- C. Quantity of Unit Price Work: An increase in the quantity of any unit price work which does not involve any basic change in the nature or conditions of the work will be paid for at the unit prices. Where work alterations increase, diminish or eliminate any of the unit price work, CONTRACTOR shall be paid for the work actually done and materials supplied at the unit prices. Unit prices which have not been set as stated in Paragraph 11.7N above shall be adjusted to comply with said paragraph before payment for such changes is made.

- D. Adjusting Contract Price: If a claim is made to the ENGINEER, which states the quantity of an item of unit price work performed by the CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement, and if CONTRACTOR or OWNER believes that an increase or a decrease of expenses as a result thereof has occurred, CONTRACTOR or OWNER may claim for an increase or decrease in the contract price if:

1. there is an enlargement or reduction of the work under the original Contract Documents by more than 25 percent; or
2. there is an increase or decrease or more than 25 percent in the initial contract price; or
3. there is an increase or decrease or more than 25 percent in the quantity of a major unit price item of work.

Notwithstanding the foregoing, the OWNER and the CONTRACTOR shall be entitled to claim a cost increase or decrease only for that portion of the cost of the work which exceeds 25 percent.

- E. Adding Unit Price Work to the Contract Documents: If new, additional, or unforeseen work or material is required which, due to the nature or conditions of the work, or locations, does not conform to the quantities and classifications of unit price

work provided for in the Contract Documents, then such work or material will be considered as additional work. The work shall be executed by the CONTRACTOR, in the manner and under the quantities and classifications of unit price work set forth in a Change Order which will be entered into between the OWNER and the CONTRACTOR.

11.8 FORCE ACCOUNT WORK (COST OF THE WORK PLUS CONTRACTOR'S FEE)

- A. In General: When contract price adjustments cannot be agreed upon in advance of additional work requested by ENGINEER, OWNER may require CONTRACTOR to do such work on a force account basis.
- B. Determining Contract Price Adjustment: The value of the force account work shall be determined in accordance with Paragraph 11.3A.3.
- C. OWNER Furnished Materials: OWNER reserves the right to furnish part or all materials or equipment and CONTRACTOR shall have no claim for profit on the cost of such material or equipment so furnished.

PART 12 CHANGE OF CONTRACT TIME

12.1 CONTRACT TIME ADJUSTMENT

- A. In General: The Contract Time or milestones may only be changed by a Change Order. No claim for an adjustment in the Contract Time or milestones will be valid if not submitted in accordance with requirements of this Article 12.1.
- B. Preliminary Written Notice: Except for delays due to weather, any claim for an extension or shortening of the Contract Time shall be based on a preliminary written notice delivered by the party making the claim to the other party promptly (but in no event later than 15 days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim.
- C. Deadline for Submitting Claim Data Notice: Final notice of the extent of the claim with supporting data shall be delivered within 60 days after such occurrence. ENGINEER may allow an additional period of time to ascertain more accurate data in support of the claim.
- D. Acknowledgement: The final notice shall be accompanied by CONTRACTOR's written statement that the amount claimed is the entire adjustment to which the CONTRACTOR has reason to believe the CONTRACTOR is entitled as a result of the occurrence of said event.
- E. No Time for lack of Submittal: No time extensions will be allowed in the progress of the work attributable to CONTRACTOR's failure to make submittals required by Article 2.5.
- F. All Claims Determined by ENGINEER: All claims for adjustment in the Contract Time shall be determined by ENGINEER in accordance with Paragraph 9.8A if OWNER and CONTRACTOR cannot otherwise agree.

12.2 DELAY NOT CAUSED BY CONTRACTOR

- A. Delays caused by war, public enemy or acts of God shall be considered just cause for OWNER to grant time extensions.

- B. CONTRACTOR shall be granted time extensions for which liquidated damages will not be claimed when the delay is determined to be caused by the OWNER, other CONTRACTORS or utility companies working at OWNER's request, except when such delays are the result of CONTRACTOR's own lack of project coordination or work effort.

12.3 DELAYS RELATED TO WEATHER

- A. Delays related to weather shall only be reviewed or considered by ENGINEER after 90 percent or more of the Contract Time has been expended.
- B. In requesting weather time CONTRACTOR shall:
 - 1. Submit all weather data to ENGINEER, and
 - 2. Provide a written explanation of how weather prevented work on an item on the progress schedule's critical path.
- C. The OWNER shall grant additional time for weather delays if OWNER finds:
 - 1. Both the amount and length of inclement weather were excessive or unexpectedly severe for the time and season the work was scheduled to be performed.
 - 2. The inclement weather prevented work pursuant to a scheduled critical path item of work. If the CONTRACTOR's progress schedule during the inclement weather does not show the anticipated critical path, ENGINEER will judge which activities were critical; and
 - 3. Appropriate measures were taken by the CONTRACTOR to mitigate the effects of inclement weather.
- D. No time will be granted if the work claimed to have been delayed would not have been on the critical path except for earlier delays caused by CONTRACTOR.
- E. No time extensions will be granted for weather delay outside of the Contract Time period or the punch list time period.

PART 13 TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.1 NOTICE OF DEFECTS

- A. Prompt notice of all defective work of which OWNER or ENGINEER have actual knowledge will be given to CONTRACTOR. All defective work, whether or not in place, may be rejected, corrected or accepted as provided in this Part 13.

13.2 ACCESS TO WORK

- A. ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access and advise them of CONTRACTOR's site safety procedures and programs so that they may comply therewith as applicable.

13.3 TESTS AND INSPECTIONS

- A. In General:
 - 1. Determining Contract Compliance and Acceptance: testing, or work for determining contract compliance shall be performed by CONTRACTOR.

OWNER anticipates performing tests and Inspections or having tests and Inspections performed as part of its acceptance procedure.

2. CONTRACTOR Furnish Labor: CONTRACTOR shall furnish, at no additional cost to the OWNER, such labor as may be required to enable a thorough Inspection and culling of all materials.
 3. CONTRACTOR Furnish Samples: Upon ENGINEER's request, CONTRACTOR shall furnish to ENGINEER such samples of materials as proposed to be used, in sufficient amounts as required to make proper tests.
 4. Notice, 24 Hours: CONTRACTOR shall give ENGINEER at least 24 hours notice of readiness of the work for all required observations, tests and Inspections.
- B. Inspections, Tests and Retests:
1. If ENGINEER determines that material or equipment fails the contract requirements, ENGINEER may reject such material or equipment, or accept such as defective work in accordance with Article 13.8.
 2. Inspection and testing of materials and equipment made by ENGINEER shall not release or relieve CONTRACTOR from compliance with the Contract Documents.
 3. Any re-Inspection and retesting of work or materials rejected by ENGINEER after the initial testing or Inspection shall be at CONTRACTOR's expense until a retest meets the requirements of the Contract Documents.
- C. Costs of Inspections Assessable to:
1. If laws or regulations of any public body having jurisdiction require any work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of Inspection, testing or approval.
 2. CONTRACTOR shall be responsible for and shall pay all costs in connection with any Inspection or testing required in connection with OWNER's or ENGINEER's acceptance of a supplier of materials or equipment proposed to be incorporated in the work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the work. Adequate facilities shall be furnished free of charge to make the necessary Inspection. ENGINEER assumes no obligation to observe materials at the source of supply nor does such Inspection assure conformance to the Contract Documents.
 3. The cost of all Inspections, tests and approvals in addition to the above which are required by the Contract Documents shall be paid by OWNER (unless otherwise specified in the supplementary conditions).

13.4 DEFECTIVE WORK

- A. Any work or materials not in accordance with the Contract Documents that may be discovered before work completion shall be corrected at no additional cost to the OWNER upon notification by the ENGINEER. Failure on the part of ENGINEER to discover, condemn or reject materials or work shall not be construed to imply acceptance of the same should their noncompliance become evident before or after

work completion. It is expressly understood that nothing in this paragraph waives any of the OWNER's rights under the guarantee provision of this Part 13.

- B. Work may be judged defective by ENGINEER regardless of cause, except when such defect or failures are the result of ENGINEER's design deficiencies, acts of God, misuse by OWNER, or due to vandalism.
- C. CONTRACTOR shall immediately remove all rejected materials and equipment from the premises and to such a point distant therefrom as ENGINEER may require.

13.5 UNCOVERING WORK

- A. If any work is covered contrary to ENGINEER's written request, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and be recovered at CONTRACTOR's expense.
- B. If ENGINEER considers it necessary or advisable that covered work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, Inspection or testing as ENGINEER may require, that portion of the work in question. CONTRACTOR shall furnish all necessary labor, material and equipment.
 - 1. If it is found that such work is defective, CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, Inspection and testing and of satisfactory reconstruction, including, but not limited to, fees and charges of ENGINEERS, architects, and other professionals. If OWNER accepts such defective work, OWNER shall be entitled to an appropriate decrease in the contract price. If the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Part 11 of these general conditions.
 - 2. If such work is not found to be defective, CONTRACTOR shall be allowed an increase in the contract price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, Inspection, testing and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Parts 11 and 12.

13.6 CORRECTION OR REMOVAL OF DEFECTIVE WORK BY CONTRACTOR

- A. If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective work, whether or not fabricated, installed or completed, or, if the work has been rejected by ENGINEER, remove it from the site and replace it with non-defective work. No rejected material, the defects of which have been subsequently corrected, shall be used in the work unless approval in writing has been given by the ENGINEER. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including, but not limited to, fees and charges of OWNER, ENGINEERS, architects, and other professionals) made necessary thereby.

13.7 CORRECTION PERIOD

- A. If any portion of the work is found to be defective within 1 year after the **date of substantial completion**, CONTRACTOR shall correct it or replace it with non-

defective work. The 1 year correction period may be superseded by such longer period of time as prescribed in the Contract Documents or by special guarantee terms required by the Contract Documents.

- B. If CONTRACTOR fails to correct defective work within 15 days after rejection or notice by OWNER or ENGINEER, or in an emergency where notice and delay would cause serious risk of loss or damage, OWNER may have the defective work corrected or removed and replaced. The CONTRACTOR and CONTRACTOR's surety shall be liable for and pay for all direct, indirect and consequential costs of such correction or removal and replacement by OWNER (including, but not limited to, fees and charges of ENGINEERS, architects and other professionals).
- C. In circumstances where a portion of the work or a particular item of equipment is placed in continuous service before substantial completion of all the work, the correction period for that work or item may start from an earlier date if so provided in the Contract Documents or by Change Order.
- D. If material or equipment fails during the one year correction period or during its warranty or guarantee period and is therefore repaired or replaced by CONTRACTOR, the one year correction period or the warranty or guarantee period shall be extended by the CONTRACTOR for such repair or replacement from the date of such repair or replacement for a length of time equal to the original one year correction period or warranty or guarantee period.

13.8 ACCEPTANCE OF DEFECTIVE WORK

- A. Acceptance is OWNER's Choice: OWNER may accept defective work instead of requiring correction or removal and replacement. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to ENGINEER's evaluation of and determination to accept such defective work (such costs to be approved by ENGINEER as to reasonableness and may include, but are not limited to, fees and charges of ENGINEERS, architects, and other professionals).
- B. Decrease in Contract Price: If acceptance of defective work occurs prior to final payment, a Change Order will be issued in the case of lump sum work, or in the case of unit price work, the quantities will be adjusted accordingly. Any necessary revisions in the Contract Documents with respect to the work will be described and the OWNER shall be entitled to an appropriate decrease in the contract price. If the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Part 11.
- C. Acceptance is Not a Waiver of OWNER's Rights: OWNER's acceptance of defective work shall not release or relieve CONTRACTOR from warranty and guarantee provisions of this Part 13.

13.9 OWNER MAY CORRECT DEFECTIVE WORK

- A. Notice: OWNER may correct and remedy any work deficiency:
 - 1. If CONTRACTOR fails after 15 days' written notice of ENGINEER to proceed to correct defective work or to remove and replace rejected work as required by ENGINEER in accordance with Article 13.6; or
 - 2. If CONTRACTOR fails to perform the work in accordance with the Contract Documents; or,

3. If CONTRACTOR fails to comply with any other provision of the Contract Documents.
- B. OWNER to Expedite Work: In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may:
 1. Exclude CONTRACTOR from all or part of the site;
 2. Take possession of all or part of the work, and suspend CONTRACTOR's services related thereto;
 3. Take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site; and
 4. Incorporate in the work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere.
- C. CONTRACTOR to Allow Access: CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this Article.
- D. Direct, Indirect and Consequential Costs: All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount determined to be reasonable by ENGINEER. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the work and the OWNER shall be entitled to an appropriate decrease in the contract price. Such direct, indirect and consequential costs will include, but not be limited to, fees and charges of ENGINEERS, architects and other professionals, all court costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective work.
- E. CONTRACTOR Can Appeal: CONTRACTOR may appeal OWNER's claim in accordance with the dispute resolution process established in the Agreement.
- F. Contract Time Extension: CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the work attributable to the exercise by OWNER of OWNER's rights and remedies.

PART 14 PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 BASIS FOR PROGRESS PAYMENTS

- A. Lump Sum Work: The schedule of values (as defined in Paragraph 2.5B.3. and established as provided in Article 2.7) will serve as the basis for progress payments and will be incorporated into an Application for Payment form acceptable to ENGINEER.
- B. Unit Price Work: Progress payments will be based on the number of units completed.

14.2 APPLICATION FOR PROGRESS PAYMENTS

- A. Once a Month: Progress payments shall not be processed more often than once a month.
- B. Contents of Applications: **To request payment, CONTRACTOR shall submit to ENGINEER a signed Application for Payment, utilizing form attached as Exhibit A to General Conditions, which accurately reflects the work completed as of the date of the application and which is accompanied by such supporting**

documentation as is required by the Contract Documents. Completed Quantities shall be in whole units and total of all billings shall not exceed one hundred percent (100%) of any Bid Item.

1. Such application may include requests for payment on account of changes in the Work which have been properly authorized by Work Directive Changes but not yet included in a Change Order, if such request does not exceed the current Contract Price.
 2. Such applications may not include requests for payment of amounts the CONTRACTOR does not intend to pay to a Subcontractor or Supplier because of dispute or other reason.
- C. Materials and Equipment Supplied but Not Installed: Payment may be made for materials and equipment not incorporated in the work but delivered and suitably stored at the site or at another location agreed to in writing if the CONTRACTOR satisfies the following requirements:
1. A bill of sale, invoice or other documentation shall be attached to the application warranting that OWNER has received the materials and equipment free and clear of all liens.
 2. Evidence shall be provided which indicates the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein.
 3. All documentation shall be satisfactory to the ENGINEER.
- D. Withholding of Payment: The OWNER reserves the right to withhold the first and all subsequent partial payments due the CONTRACTOR until submittals listed in Paragraph 2.5B are submitted in a form acceptable to the ENGINEER.
- E. Retainage: The amount of retainage (if any) with respect to progress payments will be as stipulated in the Agreement or supplementary conditions.

14.3 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT

- A. CONTRACTOR warrants and guarantees that title to all work, materials and equipment covered by any Application for Payment, whether incorporated in the project or not, will pass to OWNER no later than the time of payment free and clear of all liens or other claims.

14.4 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT

- A. Submittal: ENGINEER will, within 10 days after receipt of each Application for Payment, either process the application or return the application to CONTRACTOR indicating reasons for refusing to approve payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the application. Within 30 days after presentation of an approved Application for Payment, the amount approved will (subject to the provisions of Paragraph 14.4C) be paid by OWNER to CONTRACTOR.
- B. ENGINEER May Reject Submission: ENGINEER may refuse to approve the whole or any part of any payment if, in ENGINEER's opinion:
1. the work is unsafe or inaccessible and therefore ENGINEER cannot determine if the work is acceptable;

2. the work is defective, or completed work has been damaged requiring correction or replacement;
 3. the OWNER has been required to correct defective work or complete work in accordance with Article 13.9;
 4. the ENGINEER has actual knowledge of the occurrence of any of the events enumerated in Article 15.2; or
 5. Subsequently discovered evidence, or the results of subsequent tests, nullify any payments previously made.
- C. OWNER May Reject Submission: OWNER may refuse to make payment of the full amount because:
1. claims have been made against the OWNER on account of CONTRACTOR's performance or furnishing of the work;
 2. liens or claims have been filed in connection with the work and remain unsatisfied more than 45 days;
 3. there are other items (e.g. pay reductions for defective work) entitling OWNER to an off-set against the amount recommended, and OWNER has given CONTRACTOR written notice stating the reasons for such action;
 4. the OWNER does not have in its possession an accurate updated construction progress schedule; or
 5. subsequently discovered evidence, or the results of subsequent tests, nullify any payments previously made to the extent necessary, in ENGINEER's opinion, to protect OWNER from loss.

14.5 SUBSTANTIAL COMPLETION

- A. CONTRACTOR to Certify Work is Substantially Complete: When CONTRACTOR considers the work (or portion thereof) ready for its intended use, CONTRACTOR shall certify in writing to ENGINEER that the work (or portion thereof) has been completed in accordance with the Contract Documents. CONTRACTOR shall include in such written certification a list of any items not finished.
- B. ENGINEER to Review CONTRACTOR's Certifications: Within five (5) days after ENGINEER receives CONTRACTOR certification and list of work items not finished, ENGINEER will issue written notice either agreeing the work is substantially complete or stating reasons why the work is not substantially complete.
- C. Final Inspection: If substantially complete, ENGINEER shall within a reasonable time, schedule a Final Inspection preparatory to writing the Final Inspection punch list.
- D. OWNER's Rights: OWNER shall have the right to exclude CONTRACTOR from the work after the date of substantial completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the Final Inspection punch list.

14.6 PARTIAL UTILIZATION

- A. In General: No occupancy or separate operation of part of the work will be accomplished prior to execution of a Change Order between OWNER and CONTRACTOR which fully describes the liability between OWNER and CONTRACTOR in respect of property insurance.

- B. Part of the Work is Substantially Complete: Any finished part of the work may be used by the OWNER prior to substantial completion of all of the work if:
1. the part of the work has specifically been identified in the Contract Documents; or
 2. the ENGINEER and the CONTRACTOR agree the finished parts constitute a completed separately functioning and usable part of the work which can be used without significantly interfering with CONTRACTOR's performance of the remainder of the work.
 3. the OWNER requests in writing that the OWNER is to be permitted to use any such part of the work, and
 4. the CONTRACTOR agrees any finished part of the work may be used by the OWNER prior to substantial completion of all of the work. CONTRACTOR will certify in writing to OWNER that said part of the work is ready for its intended use and is substantially complete.
- C. Part of the Work is Not Substantially Complete: Any unfinished part of the work may be used by the OWNER prior to substantial completion of all of the work if:
1. the OWNER has requested in writing that it is to be permitted to take over operation of any part of the work although it is not substantially complete.
 2. the CONTRACTOR and the ENGINEER have made an Inspection of that part of the work to determine its status of completion and they have prepared a list of the items remaining to be completed or corrected thereon before final payment;
 3. the CONTRACTOR does not object to OWNER taking over that part of the work which is not ready for separate operation by OWNER.
 4. the ENGINEER has prepared and delivered to the CONTRACTOR a list of items to be completed or corrected.
 5. the ENGINEER has prepared written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety maintenance, utilities, insurance, warranties and guarantees for that part of the work, which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing); and
 6. during such operation and prior to substantial completion of such part of the work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the list provided by the ENGINEER and to complete other related work.
- D. CONTRACTOR to Have Access: During OWNER's occupancy and operation within said part of the work, OWNER shall allow CONTRACTOR access to complete or correct items on the above-referenced list and to complete other related work.

14.7 FINAL INSPECTION

- A. When ENGINEER agrees the work (or portion of the work) is substantially complete, ENGINEER will make Final Inspection. ENGINEER will prepare a Final Inspection punch list and will deliver such list to CONTRACTOR in writing.
- B. Except for hidden or latent defects, damage due to punch list rework, fraud, gross mistakes amounting to fraud, or work required by the Contract Documents, the list shall be considered complete and final.

- C. Delivery of the Final Inspection punch list or accomplishment of the work thereon by CONTRACTOR does not relinquish any of the OWNER's rights under the CONTRACTOR's warranty and guarantee.

14.8 FINAL APPLICATION FOR PAYMENT

- A. In General: After CONTRACTOR has completed all punch list work to the satisfaction of ENGINEER and after ENGINEER has indicated that the work is acceptable (subject to the provisions of Article 14.10), CONTRACTOR may follow the procedures for progress payments and make application for final payment.
- B. Submittals Required for Final Payment: final payment (including any remaining retained money) shall not become due until CONTRACTOR submits all documentation called for in the Contract Documents and the following:
 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, have been paid or otherwise satisfied;
 2. a current or additional certificate evidencing that insurance required by the Contract Documents, which is to remain in force after final payment, is currently in effect and will not be canceled or allowed to expire until OWNER has been given at least 30 days prior written notice, by certified mail, return receipt requested.
 3. a written statement that the CONTRACTOR knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents;
 4. if previously requested by CONTRACTOR's surety, consent of surety to final payment;
 5. a certificate of occupancy if required by law, regulation or Contract Documents;
 6. all maintenance an operating instructions, schedules, guarantees, Bonds, certificates of Inspection, marked up record documents (Article 6.11) and other documents required by the Contract Documents; and
 7. if required by the OWNER, other data establishing payment or satisfaction of obligations, such as receipts, 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 shall furnish a bond satisfactory to the OWNER to indemnify the OWNER against such claim. If such claims remain unsatisfied after payments are made, CONTRACTOR shall refund to the OWNER all money that the OWNER may be compelled to pay in discharging such liens or claims, including all costs and reasonable fees and charges.

14.9 FINAL PAYMENT AND ACCEPTANCE

- A. ENGINEER's Determination: ENGINEER shall review CONTRACTOR's final Application for Payment and, based upon ENGINEER's observation of the work during construction and Final Inspection, submission by CONTRACTOR of all required documentation and determination of CONTRACTOR's compliance with the

Contract Documents, either forward the application to OWNER for payment or return it to CONTRACTOR.

- B. Work Has Been Completed: When forwarding the application to OWNER, ENGINEER shall state in writing that the work is acceptable, subject to the provisions of Article 14.10.
- C. Work Has Not Been Completed: If the work has not been completed, ENGINEER will return the application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment. CONTRACTOR shall make the necessary corrections and resubmit the application. Unless indicated otherwise in the Contract Documents, and subject to provisions of Paragraph 14.4B, 40 days after presentation to ENGINEER of the application and accompanying documentation, and with ENGINEER's recommendation and notice of acceptability, the amount requested by CONTRACTOR and confirmed by ENGINEER will become due and owing by OWNER to CONTRACTOR.
- D. Delays Not CONTRACTOR's Fault: If after substantial completion of the work, final completion is materially delayed through no fault of CONTRACTOR, or by issuance of Change Orders affecting final completion, CONTRACTOR may submit final Application for Payment as stated above. Upon ENGINEER's recommendation, OWNER may, without terminating the Construction Contract, make payment of the balance due for that portion of the work fully completed and accepted. Such payment shall be deemed a final payment, except that it shall not constitute a waiver of claims.

14.10 WAIVER OF CLAIMS

- A. The making and acceptance of final payment constitutes:
 - 1. a waiver of all claims by OWNER against CONTRACTOR, except from unsettled liens, claims from defective work appearing after Final Inspection pursuant to Article 14.7 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein. Further, however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents or of claims which have been specifically reserved by the OWNER; and
 - 2. a waiver of all claims by CONTRACTOR under the Contract Documents except those previously made in writing and still unsettled, or remaining in dispute after processing as required by Article 9.8.

14.11 POST CONSTRUCTION CONFERENCE

- A. *Within 20 days after the CONTRACTOR has completed all Punch List work to the satisfaction of the ENGINEER and after the ENGINEER has indicated that the work is acceptable, but prior to final application for payment, the CONTRACTOR shall attend a conference with the ENGINEER and others:*
 - 1. *to discuss the project's successes and failures;*
 - 2. *to discuss project procedures;*
 - 3. *to discuss change orders or work directives from the project;*
 - 4. *to discuss retainage and final payment;*
 - 5. *to discuss procedures pertaining to the processing of payments;*
 - 6. *to discuss the submittal of the "as-builts"; and*

7. *to review or discuss other items deemed necessary by ENGINEER or CONTRACTOR.*
- B. *The conference will be held at a mutually agreed time and place attended by CONTRACTOR, its superintendent and its subcontractors as appropriate. Other attendees will be:*
 1. *ENGINEER and/or resident project representative;*
 2. *representatives of OWNER;*
 3. *governmental representatives, as appropriate;*
 4. *others as requested by CONTRACTOR, OWNER or ENGINEER.*
- C. *The purpose of the conference is to review the project's successes and shortcomings, and to discuss improvements for future projects and improved communications.*
- D. *ENGINEER will preside at the post-construction conference and will arrange for recording and distributing minutes to all persons in attendance.*

PART 15 SUSPENSION OF WORK AND TERMINATION

15.1 OWNER MAY SUSPEND WORK

- A. Notice: By written notice to the CONTRACTOR, the OWNER shall have the authority to suspend the work or any portion thereof) for a period of not more than 160 days upon the occurrence of any one or more of the following events:
 1. if the work is defective;
 2. if CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment;
 3. if CONTRACTOR fails to furnish or perform the work in such a way that the completed work will conform to the Contract Documents; or
 4. the occurrence of unsuitable weather or other such conditions ENGINEER considers unfavorable for suitable prosecution of the work.
- B. Suspension Shall Not Benefit CONTRACTOR: This right of OWNER to stop the work shall not give rise to any duty on the part of OWNER or ENGINEER to exercise this right for the benefit of CONTRACTOR or any other party.
- C. Safe, Secure and Smooth Site: If work is suspended by the OWNER, the CONTRACTOR shall do work necessary to provide a safe and secure site. If pedestrian or vehicular access is required, a smooth and unobstructed passageway shall be provided through the construction site. In the event the CONTRACTOR fails to perform this work, the OWNER may perform such work and the cost thereof will be deducted from money due or to become due the CONTRACTOR.
- D. Contract Time During Suspension: If a suspension of work is ordered by OWNER or ENGINEER because the CONTRACTOR refuses or fails to comply with the Contract Documents, the days on which the suspension order is in effect shall be considered as part of the Contract Time. Such suspension of work shall not release or relieve the CONTRACTOR from the CONTRACTOR's responsibilities set forth in the Contract Documents.
- E. Resumption of the Work: the suspended work shall be resumed on the date fixed by ENGINEER, which date shall be the earlier of 120 days after the issuance of the suspension order or the date all of the conditions cited in the order are satisfied.

- F. Work Suspension claims: Except as listed below, CONTRACTOR shall be allowed an increase in the contract price or an extension of the Contract Time, or both, if CONTRACTOR makes an approved claim as provided for in Parts 11 and 12.
1. Any work done during the suspension of the work will not be accepted and paid for unless approved in writing by the ENGINEER.
 2. There shall be no claim against or liability on the part of the OWNER and ENGINEER for failure on the part of the CONTRACTOR to comply with the Contract Documents.

15.2 OWNER MAY TERMINATE

- A. Notice, and Reason Therefore: OWNER may terminate the services of the CONTRACTOR and exclude the CONTRACTOR from the site after giving CONTRACTOR and the surety 10 days written notice. Such termination by OWNER may result from the occurrence of any one or more of the following events:
1. if a petition is filed against CONTRACTOR under any chapter of the bankruptcy code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency, and if such involuntary petition remains unsatisfied for more than 30 days.;
 2. if CONTRACTOR makes a general assignment for the benefit of creditors;
 3. if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;
 4. if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;
 5. if CONTRACTOR fails to perform the work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under Paragraph 2.7A.1. as revised from time to time);
 6. if CONTRACTOR disregards laws or regulations of any public body having jurisdiction;
 7. if CONTRACTOR disregards the authority of ENGINEER; or
 8. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents.
- B. Completion of Work by Others: OWNER may, to the extent permitted by laws and regulations, either allow the surety to complete the work or take possession of the work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to complete the work (without any liability to CONTRACTOR for trespass or conversion). OWNER may incorporate in the work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the work as ENGINEER may deem expedient. CONTRACTOR shall cooperate in any way necessary to allow the work to be completed.
- C. Adjustment to Cost of the Work:

1. Upon terminating the services of the CONTRACTOR, the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. Final payment to CONTRACTOR or CONTRACTOR reimbursement to the OWNER shall be as follows:
 - a. if unpaid balance of the contract price exceeds the direct, indirect and consequential costs of completing the work (including, but not limited to, fees and charges of ENGINEERS, architects, and other professionals), such excess will be paid to CONTRACTOR; and
 - b. if the direct, indirect and consequential costs of completing the work exceed the unpaid balance, CONTRACTOR and the surety shall be liable to pay the OWNER for such costs exceeding the unpaid balance.
 2. Such direct, indirect and consequential costs incurred by the OWNER to complete the work will be incorporated in a Change Order. To secure such a Change Order, when exercising any rights or remedies under this paragraph ENGINEER shall not be required to obtain the lowest price for the work to be performed.
- D. Waiver of Any Default: Waiver of any default shall not be deemed to be a waiver of any subsequent default. Waiver of breach of any provision of the Contract Documents shall not be construed to be a modification of the Contract Documents, unless stated to be such in a Change Order, signed by OWNER.
- E. Termination Will Not Affect Any Right or Remedies: Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. An retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.
- F. Termination for OWNER's Convenience: Upon 10 days' written notice to CONTRACTOR, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the work and terminate the construction contract. In such case, CONTRACTOR shall be paid for all work executed and any expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs *less OWNER's costs*. Anticipated profit upon terminated work shall not be included as part of CONTRACTOR's termination costs.

15.3 TERMINATION OF WORK BY CONTRACTOR

- A. In General: If the work is stopped for a period of more than 120 days through no act or fault of the CONTRACTOR or CONTRACTOR's agents or employees or any other persons performing portions of the work under contract with any of the above, the CONTRACTOR may terminate the Construction Contract in accordance with 15.3B herein below for any of the following reasons:
1. the OWNER has persistently failed to fulfill fundamental OWNER's obligations under the Contract Documents with respect to matters important to the progress of the work;
 2. issuance of an order of a court or other public authority having jurisdiction, except that where the CONTRACTOR has standing, the CONTRACTOR must cooperate in efforts to stay or appeal such order;

3. an act of government, such as a declaration or national emergency, making necessary materials unavailable; or
 4. unavoidable casualties or other similar causes as acts of God or of the public enemy, acts of the state or federal government in either their sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather which materially interfere with CONTRACTOR's ability to complete the work, but in every case the failure to perform must be beyond the control and without the fault or negligence of the CONTRACTOR or anyone for whom the CONTRACTOR may be liable.
- B. Notice: If one of the reasons for termination in 15.3A still exists after the CONTRACTOR gives an additional 10 days written notice to the ENGINEER, the CONTRACTOR may terminate the Construction Contract and recover from the OWNER payment for work executed and for proved loss with respect to materials, equipment, tools, construction equipment and machinery, including reasonable overhead. Anticipated profit on work not performed shall not be allowed.
- C. Continuing the Work: the provisions of 14.2A and 15.3B shall not release or relieve the CONTRACTOR from CONTRACTOR's obligation under Article 6.15 to carry on the work in accordance with the progress schedule and without delay during disputes and disagreements with the OWNER.

PART 16 DISPUTE RESOLUTION

16.1 APPEALS PROCESS

- A. Any written decision rendered by ENGINEER pursuant to Paragraph 9.8A may be appealed by CONTRACTOR. Such appeal may be taken from any such decision in accordance with any provisions provided in the Agreement or supplementary conditions concerning dispute resolution and with applicable laws and regulations.
- B. During any such appeal, OWNER may issue a work directive change requiring the CONTRACTOR to perform such disputed work and to continue the work as provided in Article 6.15.
- C. No demand for dispute resolution of any claim, dispute or other matter that is required to be referred to ENGINEER initially for decision in accordance with Paragraph 9.8A will be made until (a) the ENGINEER has rendered a written decision or (b) by the 31st day after the claim, dispute or other matter was presented to the ENGINEER.
- D. No demand for dispute resolution of any claim dispute or other matter will be made later than 30 days after the date on which ENGINEER has rendered a written decision in respect thereof in accordance with Paragraph 9.8; and the failure to demand dispute resolution within said 30 days' period will result in ENGINEER's decision being final and binding upon OWNER and CONTRACTOR.
- E. If the ENGINEER renders a decision after dispute proceedings have been initiated, such decision may be entered as evidence but will not supersede the dispute resolution proceedings, except where the decision is acceptable to the parties concerned.
- F. No demand for dispute resolution of any written decision of ENGINEER rendered in accordance with Paragraph 9.8 will be made later than 10 days after the party making

such demand has delivered written notice of intention to appeal as provided in paragraph 9.7.

- G. Notice of the demand for dispute resolution will be filed in writing with the ENGINEER. The demand for dispute resolution will be made within the 30 day or 10 day period specified in Paragraph 16.1C and 16.1F as applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

PART 17 MISCELLANEOUS

17.1 GIVING NOTICE

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly received if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or it is received by registered or certified mail, postage prepaid or by facsimile.
- B. Notices sent as required by paragraph 17.1A shall be effective on the date on which such notice was sent.
- C. Facsimile notice shall be effective on the date of transmission provided that a confirmation establishing the successful transmission of the notice is sent by first-class mail, postage prepaid, along with a copy of the notice transmitted, no later than 24 hours after the facsimile notice is transmitted.
- D. If any notice requires a period of less than seven (7) days for response, the notice shall be sent by facsimile.
- E. Sureties shall receive notice at the business addresses shown on the Bonds.
- F. CONTRACTOR shall receive notice at the business address shown on the Agreement.

17.2 COMPUTATION OF TIME

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

17.3 NOTICE OF CLAIM TIME LIMITS

- A. Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

17.4 CUMULATIVE REMEDIES

- A. The duties, obligations, rights and remedies imposed by these general conditions are in addition to any right and remedies available to OWNER and CONTRACTOR under available laws or regulations, special warranty or special guarantee. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Construction Contract.

END OF DOCUMENT

EXHIBIT A

Project Name: Ogden Airport Well House Project		Pay Request #:											
Contract #:		Billing Period:											
Contract To:													
Address:													
					PREVIOUS		CURRENT		TOTAL				
BID ITEM	DESCRIPTION	BID UNIT	BID QUANTITY	UNIT PRICE	CONTRACT AMOUNT	COMPLETED QUANTITIES	BILLINGS TO DATE	COMPLETED QUANTITIES	DUE THIS BILLING	COMPLETED QUANTITIES	BILLINGS TO DATE	PERCENT COMPLETE	
1	Mobilization/Demobilization	LS	1										
2	Traffic Control	LS	1										
3	Survey	LS	1										
4	Quality Control	LS	1										
5	Site Demolition and Earthwork	LS	1										
6	Pump House Mechanical & Piping, Complete	LS	1										
7	Construct Pump House Building, Complete	LS	1										
8	HVAC Equipment, Complete	LS	1										
9	Purchase Backup Generator & Automatic Transfer Switch (Includes 18" Concrete Equipment Pad)	LS	1										
10	SWPPP/Erosion Control	LS	1										
11	Repair Landscaping and Irrigation	LS	1										
12	Remove, Modify Existing Fence and Install New 20' Gate	LS	1										
13	Install Bollard	EA	28										
14	Construct New Storm Water Retention Basin, Complete	LS	1										
15	Site Fill	LS	1										
16	Sawcut Asphalt	LF	120										
17	Install New Curb and Gutter	LF	590										
18	3" Compacted Asphalt Pavement	TON	240										
19	Untreated Base Course	CY	325										
20	Concrete Pavement, Reinforced	SF	3,150										
21	Pressure Relief Valve, Vault and 6-inch Piping	LS	1										
22	PRV and Valve Vault on Airport Road, Complete	LS	1										
23	60" Drain Manhole	EA	1										
24	48" Storm Drain Manhole	EA	1										
25	18" RCP Storm Drain Piping and Connection to Existing Box	LF	250										
26	DI piping, 16 inch, Including Connection to Existing	LF	110										
27	1" PEXa Waterline	LF	110										
28	Electrical, Complete	LS	1										
29	Tablet Chlorination, Complete	LS	1										
30	Polyphosphate Equipment, Complete	LS	1										
31	Security Camera, Alarms, Etc., Complete	LS	1										
32	Stamped Concrete Parkstrip	SF	160										
33	Concrete Sidewalk	SF	160										

**EXHIBIT B
OGDEN CITY ENGINEERING
CONTRACT CHANGE ORDER REQUEST FORM**

Change Order No. 1		Contractor:			
Date:		Project:			
PO:		PA No.:			
Funding Account(s):		Contract No.:			

Item No.	Bid Item No.	Description	Est Qty	Unit	Unit Price	Amount
						\$0.00
Sub Total for Bid Items						\$0.00
Additional Items						
						\$0.00
SUB TOTAL FOR ADDITIONAL ITEMS						\$0.00
		Total Changes				\$0.00

Original Contract Price:	Percent of Contract Price Change:	#DN/0!
Net Change Increase:		0.00
Previous Change Request(s):		0.00
Contract Extensions:		0.00
Original Contract Price:		
New Contract Price:		

The contract time shall be extended by **0 Calendar days**. All other terms and conditions shall remain the same.

Change Order Justification:	
0	Ogden City Corporation, A Utah Municipal Corporation
By: _____	By: _____
Title/Date _____	Title/Date _____ <i>(Div Mgt/Dept Dir/CAO)</i>
Approving Agencies:	Attest: _____
_____	City Recorder/Date
City Engineer/Eng Mgr/ Date	Approved as to form:
_____	_____
PS Director/Date	City Attorney/Date
_____	_____
Comptroller	Funding Source:
_____	_____
Mgmt Serv Dir/Date	Division Mgr
_____	_____

SECTION 01 58 00

PROJECT IDENTIFICATION AND SIGNS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary on-site identification and informational signs to identify key elements of construction facilities and traffic routing.

1.2 SUBMITTALS

- A. Sketch of informational signs.

1.3 QUALITY ASSURANCE

- A. Sign Painter: Professional experienced in type of work required.
- B. Finishes, Painting: Adequate to resist weathering and fading for scheduled construction period.

PART 2 PRODUCTS

2.1 SIGN MATERIALS

- A. Structure and Framing: May be new or used, wood or metal, in sound condition, structurally adequate to work and suitable for specified finish.
- B. Sign Surfaces: Exterior grade plywood.
 - 1. Type 4' x 4': 4-feet high by 4-feet wide.
 - 2. Type 4' x 8': 4-feet high by 8-feet wide.
 - 3. Thickness: As required by standards to span framing members, resist wind loading, and to provide even, smooth surface without waves or buckles.
- C. Rough Hardware: Galvanized steel or equal.
- D. Paint: Exterior quality.
 - 1. Background: White.
 - 2. Lettering: Black
 - 3. Accents: Green.

PART 3 EXECUTION

3.1 PROJECT IDENTIFICATION SIGN

- A. Content to include:
 - 1. Title of Project.
 - 2. City logo and Public Services logo.
 - 3. Name of Mayor.

4. Names of city council members and the district they represent.
 5. Names of professional consultants and their titles.
 6. Name of Engineer and title.
 7. Name of Contractor.
- B. Graphic design, style of lettering, colors: **Coordinate with Ogden City.**
- C. Paint exposed surfaces of supports, framing and surface material; one coat of primer and one coat of exterior paint.
- D. Erect on the site at a lighted location of high public visibility, adjacent to main entrance to site, as approved by Engineer.

3.2 INFORMATIONAL SIGNS

- A. Size of signs and lettering: As required by regulatory agencies, or as appropriate to usage.
- B. Colors: As required by regulatory agencies, otherwise of uniform colors throughout project.
- C. Paint exposed surfaces: One coat of primer and one coat of exterior paint.
- D. Paint graphics in styles, sizes and colors selected.
- E. Install at a height for optimum visibility, on ground-mounted poles or attached to temporary structural surfaces.

3.3 MAINTENANCE

- A. Maintain signs and supports in a neat, clean condition; repair damages to structure, framing or sign.
- B. Relocate informational signs as required by progress of the work.
- C. Remove graffiti from signs immediately.

3.4 REMOVAL

- A. Remove signs, framing, supports and foundations at completion of project.
- B. Repair landscaping and surface improvements damaged by removals.

END OF SECTION

SECTION 08 33 23
ADDENDUM NO. 1 - OVERHEAD COILING DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Insulated service doors.

B. Related Sections:

1. Division 5 for miscellaneous steel supports.
2. Division 9 for finish painting of factory-primed doors.
3. ~~Division 26 Sections for electrical service and connections for powered operators and accessories.~~

1.3 PERFORMANCE REQUIREMENTS

- A. Operation Cycles: Provide overhead coiling door components and operators capable of operating for not less than number of cycles indicated for each door. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.
- B. Wind Loading: Overhead coiling door shall be designed and reinforced to withstand a 30-psf wind-loading pressure.

1.4 SUBMITTALS

- A. Product Data: For each type and size of overhead coiling door and accessory. Include the following:
1. Construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
 2. **Rated capacities, operating characteristics, and furnished accessories.**
 3. For fire-rated doors, description of fire-release system including testing and resetting instructions.
- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data. Include plans, elevations, sections, details, and attachments to other work.
1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 2. Show locations of replaceable fusible links.

- C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
 - 1. Include similar Samples of accessories involving color selection.
 - D. Qualification Data: For qualified Installer.
 - E. Maintenance Data: For overhead coiling doors to include in maintenance manuals.
- 1.5 QUALITY ASSURANCE
- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for both installation and maintenance of units required for this Project.
 - B. Source Limitations: Obtain overhead coiling doors from single source from single manufacturer.
 - 1. Obtain operators and controls from overhead coiling door manufacturer.

PART 2 - PRODUCTS

2.1 DOOR CURTAIN MATERIALS AND CONSTRUCTION

- A. Door Curtains: Fabricate overhead coiling-door curtain of interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:
 - 1. Steel Door Curtain Slats: Zinc-coated (galvanized), cold-rolled structural steel sheet; complying with ASTM A 653/A 653M, with G90 zinc coating; nominal sheet thickness (coated) of 0.028 inch and as required to meet requirements.
 - 2. Insulation: Fill slats for insulated doors with manufacturer's standard thermal insulation complying with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84. Enclose insulation completely within slat faces.
 - 3. Gasket Seal: Provide insulated slats with manufacturer's standard interior-to-exterior thermal break or with continuous gaskets between slats.
- B. Bottom Bar for Service Doors: Consisting of two angles, each not less than 1-1/2 by 1-1/2 by 1/8 inch thick; fabricated from manufacturer's standard hot-dip galvanized steel, stainless steel, or aluminum extrusions to match curtain slats and finish.

2.2 HOOD

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.
 - 1. Galvanized Steel: Nominal 0.028-inch- thick, hot-dip galvanized steel sheet with G90 zinc coating, complying with ASTM A 653/A 653M.

2.3 LOCKING DEVICES

- A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on both left and right jamb sides, operable from coil side.
- B. Chain Lock Keeper: Suitable for padlock.

2.4 CURTAIN ACCESSORIES

- A. Weatherseals: Equip each exterior door with weather-stripping gaskets fitted to entire perimeter of door for a weathertight installation, unless otherwise indicated.
 - 1. At door head, use 1/8-inch- thick, replaceable, continuous sheet secured to inside of hood.
 - 2. At door jambs, use replaceable, adjustable, continuous, flexible, 1/8-inch- thick seals of flexible vinyl, rubber, or neoprene.
- B. Push/Pull Handles: Equip each push-up-operated or emergency-operated door with lifting handles on each side of door, finished to match door.
 - 1. Provide pull-down straps or pole hooks for doors more than 84 inches high.

2.5 COUNTERBALANCING MECHANISM

- A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.
- B. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, welded or seamless carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than 0.03 in./ft. of span under full load.
- C. Spring Balance: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.
- D. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.
- E. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

2.6 MANUAL DOOR OPERATORS

- A. Equip door with manufacturer's recommended manual door operator unless another type of door operator is indicated.
- B. Chain-Hoist Operator: Consisting of endless steel hand chain, chain-pocket wheel and guard, and gear-reduction unit with a maximum 30 lbf force for door operation. Provide alloy-steel hand chain with chain holder secured to operator guide.

2.7 ELECTRIC DOOR OPERATORS

- A. General: Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door [and operation cycles requirement] specified, with electric motor and factory prewired motor controls, starter, gear reduction unit, solenoid operated brake, clutch, remote control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
1. Comply with NFPA 70.
 2. Provide control equipment complying with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24 V, ac or dc.
- B. Usage Classification: Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.
- C. Door Operator Location(s): Operator location indicated for each door.
1. Top of Hood Mounted: Operator is mounted to the right or left door head plate with the operator on top of the door hood assembly and connected to the door drive shaft with drive chain and sprockets. Headroom is required for this type of mounting.
 2. Front of Hood Mounted: Operator is mounted to the right or left door head plate with the operator on coil side of the door hood assembly and connected to the door drive shaft with drive chain and sprockets. Front clearance is required for this type of mounting.
 3. Wall Mounted: Operator is mounted to the inside front wall on the left or right side of door and connected to door drive shaft with drive chain and sprockets. Side room is required for this type of mounting. Wall mounted operator can also be mounted above or below shaft; if above shaft, headroom is required.
 4. Bench Mounted: Operator is mounted to the right or left door head plate and connected to the door drive shaft with drive chain and sprockets. Side room is required for this type of mounting.
 5. Through Wall Mounted: Operator is mounted on other side of wall from coil side of door.

2.8 DOOR ASSEMBLY

- A. Service Door: Overhead coiling door formed with curtain of interlocking metal slats.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. ACME Rolling Doors.
 - b. Alpine Overhead Doors, Inc.
 - c. AlumaTek, Inc.
 - d. C.H.I. Overhead Doors.
 - e. City-Gates.
 - f. Cookson Company.
 - g. Cornell Iron Works, Inc.
 - h. Dynamic Closures Corp.
 - i. Lawrence Roll-Up Doors, Inc.
 - j. Mahon Door Corporation.
 - k. McKeon Rolling Steel Door Company, Inc.

- l. Metro Door.
 - m. Overhead Door Corporation.
 - n. QMI Security Solutions.
 - o. Raynor.
 - p. Southwestern Steel Rolling Door Co.
 - q. Wayne-Dalton Corp.
 - r. Windsor Door.
 - s. <Insert manufacturer's name>.
- B. Operation Cycles: Not less than 50,000.
- 1. Include tamperproof cycle counter.
- C. Door Curtain Material: Galvanized steel.
- D. Door Curtain Slats: Flat 2-5/8-inch center-to-center height.
- 1. Insulated-Slat Interior Facing: Metal.
- E. Curtain Jamb Guides: Galvanized steel with exposed finish matching curtain slats. Provide continuous integral wear strips to prevent metal-to-metal contact and to minimize operational noise.
- F. Locking Devices: Equip door with slide bolt for padlock.
- 1. Locking Device Assembly: Cremone type, both jamb sides locking bars, operable from inside with thumb turn.
- G. Manual Door Operator: Chain-hoist operator.
- H. Door Finish:
- 1. Baked-Enamel Finish: Color as selected by Owner from manufacturer's full range. Color shall match colors of other doors on the building.
 - 2. Interior Curtain-Slat Facing: Match finish of exterior curtain-slat face.

2.9 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.10 STEEL AND GALVANIZED-STEEL FINISHES

- A. Factory Prime Finish: Manufacturer's standard primer, compatible with field-applied finish. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.
- B. Baked-Enamel Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install overhead coiling doors, hoods, and operators at the mounting locations indicated for each door.
- C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.

3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
 - 1. Perform installation and startup checks according to manufacturer's written instructions.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust seals to provide weathertight fit around entire perimeter.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION

**SECTION 43 24 03
ADDENDUM NO. 1 - VERICAL TURBINE PUMPS**

PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor shall provide vertical turbine pumps and drives with associated appurtenances, complete and operable, in accordance with the Contract Documents.
- B. The requirements of Section 43 20 10 – Pumps, General apply to this Section.
- C. The Supplier shall examine the Site conditions, intended application, and operation of the pump system and recommend the pump that will best satisfy the indicated requirements.

1.2 CONTRACTOR SUBMITTALS

- A. Shop Drawings: Submittals shall be made in accordance with Section 01 33 00 – Contractor Submittals and Section 43 20 10 – Pumps, General.
- B. Spare Parts List: The Contractor shall obtain from the manufacturer and submit at the same time as Shop Drawings a list of manufacturer suggested spare parts for each piece of equipment specified. The Contractor shall also furnish the name, address and telephone number for the nearest distributor for each piece of equipment.
- C. Operation and Maintenance Manual: Provide technical operation and maintenance manuals in accordance with Section 01 33 00 – Contractor Submittals.

1.3 QUALITY ASSURANCE

- A. All pumps shall be factory tested in accordance with Section 11 00 00 – Equipment General Provisions.
- B. Provide pump manufacturer’s standard one-year warranty which starts upon substantial completion of the project.

PART 2 - PRODUCTS

2.1 GENERAL

A. Pump Identification:

Pump Name	Vertical Turbine Pump
Equipment Number	P-01
Location	Pump Room

2.2 OPERATING CONDITIONS

A. The Work of this Section shall be suitable for long term operation under the following conditions:

Parameter	Units	Value
Duty		Continuous
Drive		Variable speed
Ambient environment		Indoors
Ambient temperature	Deg F	35 to 110
Ambient relative humidity	%	20 to 95
Fluid service		Potable Water
Fluid temperature	Deg F	40 to 75
Fluid pH range		7.0 to 8
Fluid specific gravity		1.0
Fluid viscosity	absolute centipoises at 60 deg F	1.14
Project site elevation	ft, msl	4445.50
Minimum water surface in well casing (low water level)	ft, msl	4087.00
Maximum water surface in well casing (static water level)	ft, msl	4245.00

2.3 PERFORMANCE REQUIREMENTS

A. Each pump shall meet the following minimum performance requirements:

Parameter	Units	Value
Design flow capacity	gpm	2725
Design flow head TDH	ft	690
Design flow minimum efficiency	%	82
Minimum efficiency at maximum flow	%	75
NPSH required	ft	Not to exceed 20 ft of water absolute at any condition from shutoff to minimum pump head.
Maximum pump speed	rpm	1800
Maximum motor speed	rpm	1800
Minimum motor size	HP	700

B. Maximum head and flow shall be right of the best efficiency point on the pump curve to ensure the largest range of pumping efficiency. Variable speed curves are required as part of this submittal.

C. Pump Dimensions

Parameter	Units	Value
Approximate length from base plate to suction bell, final length determined by manufacturer	ft	411
Minimum column diameter	inch	12
Minimum discharge diameter	inch	14
Discharge flange rating ANSI	psi	150
Minimum column shaft diameter	inch	2-3/16
Maximum bowl diameter	inch	16

D.

2.4 MATERIALS OF CONSTRUCTION

A. Each vertical turbine pumps shall conform to the following requirements:

Bowls	Castings shall be of ASTM A48, Class 30 close grained cast iron smooth and free of all casting imperfections. The water passages shall be lined with porcelain enamel coating to reduce friction loss and improve efficiency.
Impeller	Impellers shall be of lead free bronze of the enclosed type, statically balanced. All impeller vanes shall be underfiled to ensure a uniform dimension of the vanes. Impellers shall be sized so the pump will operate within +/- 3% of the best efficiency point of the curve and to allow for a minimum of 10% increase in head at the rated capacity. On multiple stage pumps, all impellers shall be the same diameter. They shall be securely fastened to the impeller shaft with keys, stainless steel taper bushings, or lock nuts.
Bowl shaft	Bowl shaft shall be of A582 grade 416 stainless steel of not less than 12 percent chromium, heat-treated, ground and polished. Shaft diameter shall be sized for the total axial thrust plus the weight of all rotating parts supported by it and the horsepower transmitted. Maximum combined shear stress shall not exceed 30 percent of the elastic limit in tension or be more than 18 percent of the ultimate tensile strength of the shafting material. The bowl shaft shall be supported by bronze bearings of ASTM B505 alloy C932 (or other recommended alloy better suited to the application) above and below each impeller. The suction case bearing shall be grease lubricated and protected by a bronze sand collar. Pump manufacturer shall determine shaft diameter requirements for the application and submit detailed calculations according to AWWA E-102 to confirm the selection
Suction bell	Cast iron bell, with bottom bearing and streamlined ribs, lining and coating, see bowls
Column	Column pipe shall comply with ASTM A53 Grade B steel pipe with a minimum wall thickness of 0.330 inch. Column sections shall not exceed 10 feet in length and shall be

	interchangeable. Each section shall be equipped with butt threaded coupling and column pipe suitable for the pump shutoff head. Friction pipe loss shall not exceed 5 feet per 100 feet based on the rated capacity of the pump.
Line shaft and couplings	Line shafts shall be of carbon steel, C1045, turned and ground. Pump manufacturer shall determine shaft diameter requirements for the application and submit detailed calculations according to AWWA E-102 to confirm the selection. Line shafting materials shall have a minimum tensile strength of 105,000 psi and yield strength of 80,000 psi. The butting faces shall be machined square to the axis of the shaft, with maximum permissible axial misalignment of the thread axis with the shaft axis of 0.002 inches in 6 inches. Surface finish shall not exceed 40 RMS. It shall be furnished in lengths not greater than 10 feet with the ends faced squarely to assure perfect alignment after installation. Shafting shall be coupled with steel couplings, designed with a safety factor of one and half times the shaft safety factor and shall be left-hand thread to tighten during pump operation. Shaft shall be provided with a non-corrosive shaft sleeve of 304 stainless steel at the location of each guide bearing. Bearing surface shall not exceed 40 RMS finish.
Shaft lubrication	Product water
Shaft seal	Water-lubricated with packing design. Packing box shall contain no less than 6 graphite fiberglass packing rings and 2 ASTM B584GDC83600 Lantern rings. Sealing between the stuffing box and the discharge head and the plat and shaft enclosing tube shall be accomplished by means of "O" rings. Headshaft materials, dimensions, configuration, etc. shall be compatible with the recommended packing.
Line shaft bearings	Shaft bearings shall be standard neoprene fluted rubber, or other alloy better suited to the application. The bearings shall be mounted in bronze bearing retainers held in position in the column couplings by means of the butted ends or flanges of the column pipe. Bearings shall be located at intervals of no more than 10 feet.
Discharge head	Fabricated steel, reinforced to withstand pipe thrust, epoxy-lined with flange. A ½" NPT pressure gauge connection shall be supplied on the discharge connection. The discharge head shall have a rabbet fit to accurately locate a standard NEMA P base, vertical hollow shaft driver, and have a diameter equal to the driver base diameter. The discharge head shall be supplied with adequate integral motor stand height to accept the sealing arrangement required. All weldments shall be per ASME Code Section VIII. All welds shall be seamless. Discharge head dimensions, base flange to centerline of discharge flange, shall conform to those shown on the Drawings. Base plate of the thickness and strength for

	the pump at the required setting below ground, and four minimum 2-inch, 3000 lb forged steel half-couplings for future well treatment, and spares. Provide reducers as necessary for connection to 1-1/2-inch PVC tubes
Motor shaft coupling	Vertical Hollow Shaft
Bowl and suction	Product-lubricated bronze sleeves case bearings
Nameplates	Brass or stainless steel nameplates giving the manufacturer's model and serial number, rated capacity, head, speed and all other pertinent data shall be attached to the pump.
Coatings	Coatings and application shall conform to Section 09 90 00 – Coatings and Painting. Discharge heads shall be coated using System No. 4 and lined using System No. 1 to the specified DFTs. Pump columns shall be uncoated and unlined. Pump bowls shall be line as specified above and coated using system No. 1 to the specified DFTs.
Strainer	Pump shall be supplied with stainless steel cone strainer

2.5 ELECTRICAL REQUIREMENTS

- A. Drive: The pump shall be provided with a vertical, hollow shaft, premium efficiency, high thrust, 480 volt, 3-phase, 60-Hertz heavy duty, electric motor. The electric motor shall be designed to accept the total, unbalanced thrust imposed by the pump. Thrust bearings shall be rated for a minimum L-10 life of 40,000 hours. Electric motor shall be rated for elevation 4500 feet, inverter duty rated, shall have shaft grounding ring, insulated bearings and have a WP-1 enclosure. See specification 26 20 00.
- B. Pump shall be controlled by an electronic Variable Frequency Drive as noted on the design drawings.
- C. Well Level Transmitter shall be purchased and installed by the well pump supplier for the project and coordinated with the electrician. Pump supplier shall install transmitter in existing external 2" water level sounding tube.
- D. The existing 2" well level sounding tube and the 2-1/2" gravel feed tubes must be reconfigured by a licensed pump installer or well driller to extend up 18 inches above the floor, accessible with a threaded cap. Large radius bends must be utilized for installation of transducer and gravel down the tubes. No standard fittings will be allowed.
- E. An external well vent pipe shall be provided per the drawings by a licensed pump installer or well driller and extend up 18 inches above the floor.
- F. Pump supplier shall provide and install two additional 1-1/2" standard flush threaded schedule 80 PVC tubes (one tube terminated at the high water elevation, and another terminated at the top of the bowls) for future on-site hypo chlorination. Tubes shall extend 6" minimum above discharge head plate with threaded cap. Pump supplier shall label tubes. Tubes shall be secured to pump column at 10-ft maximum spacing with stainless steel bands.

G. Pump shall be supplied with a water pre-lube system including piping, port in the pump, solenoid valve and all other equipment necessary to provide lubrication the pump shaft prior to pump start.

2.6 CONTROLS & INSTRUMENTATION

A. Pumps shall be controlled in accordance with Division 40.

2.7 SPARE PARTS

A. Furnish the following spare parts for a single pump unit of each type specified: None

2.8 MANUFACTURER'S, OR EQUAL:

A. Fairbanks Morse

B. Floway

C. FlowServe

D. Goulds Pumps, Inc.

E. National Pump LLC

PART 3 - EXECUTION

3.1 SERVICES OF MANUFACTURER

A. Inspection, Startup, and Field Adjustment: The service representative of the manufacturer shall be present at the Site for 3 working days, to furnish the services required by Section 43 20 10 – Pumps, General.

B. Instruction of Owner's Personnel: The training representative of the manufacturer shall be present at the Site for 1 work day to furnish the services required by Section 43 20 10 – Pumps, General.

C. For the purposes of this paragraph, a work day is defined as an 8 hour period at the Site, excluding travel time. All on-site work hours shall be coordinated with the Owner and/or General Contractor.

D. The Engineer may require that the inspection, startup, and field adjustment services above be furnished in 3 separate trips.

END OF SECTION

SECTION 46 33 00
ADDENDUM NO. 1 - CHEMICAL FEEDING EQUIPMENT, GENERAL

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The system shall be designed to feed low concentrations of calcium hypochlorite in solution intermittently or continuously as required for water treatment applications, such as process, potable, waste, etc. The system shall be a single pre-assembled, package unit in a welded aluminum frame consisting of chlorinator, electrical boxes, centrifugal pump, and balance tank for ease of installation and operation. Field assembled systems shall not be acceptable. The system shall be the PowerPro® Model 3150 by AXIALL, LLC. Only NSF Standard 60 listed Accu-Tab® SI (scale inhibitor) calcium hypochlorite tablets by AXIALL, LLC shall be used.
- B. The base proposal requires furnishing equipment as specified herein. The bidder is cautioned that substitutions must meet the quality and operational requirements of each feature specified in Section 1.02 below. Batch systems with pressure mixing components producing chlorine concentrations exceeding the limits of the specifications will not be considered.
- C. Any system offered shall use an NSF Standard 61 listed erosion feeder (not all AXIALL feeders are NSF listed), an NSF Standard 60 listed calcium hypochlorite tablet, and shall be capable of meeting all requirements of the Health Department having jurisdiction over the installation.

1.2 SYSTEM FEATURES

- A. A maximum chlorine solution level of 0.05% (500 ppm) shall be maintained to prevent calcification in system components. Systems producing chlorine concentrations higher than 0.05% shall not be acceptable.
- B. The capacity of the chlorine feed equipment shall be sized to provide at least 2 mg/L during peak demand.
- C. The feed equipment shall operate over the design feeding range.
- D. The fee equipment shall be designed to maintain a detectable residual at all times.
- E. Delivery shall be by erosion feed technology to control accurate and consistent concentration limits in the chlorine treatment solution. Spray and/or vortex technology systems shall not be acceptable.
- F. The chlorinator shall automatically and continuously feed a limited quantity of chlorine in solution as needed; when the system is not running, no more chlorine than that amount which can be fed in one minute or less shall be left in the tank to prevent chlorine loss. Batch systems preparing excess quantities of solution for delivery over an extended period shall not be acceptable.

- G. A centrifugal pump wired to the system electrical box shall feed freshly mixed chlorine treatment solution only as required for maximum efficiency. Batch systems requiring the use of a metering pump or pumps to feed pre-prepared standing solution shall not be acceptable.
- H. All piping in the chlorinator unit shall be Schedule 80 PVC for durability. Systems with flexible tubing shall not be acceptable.

PART 2 – PRODUCTS

2.1 SYSTEM COMPONENTS

- A. *Meter Pump.* Grundfos CR 5-14 or approved equal.
- B. *Tablet Chlorinator.* Accu-Tab or equal. Accu-Tab® chlorinators by AXIALL, LLC are designed exclusively for Accu-Tab® SI calcium hypochlorite tablets by AXIALL, LLC. Tablets are placed on a sieve plate inside the chlorinator; as water flows across the sieve plate, the tablets erode at a rate proportional to the flow rate.
- C. *Dissolution Equipment.* The hypochlorite dissolution equipment for drinking water treatment shall be certified as meeting the ANSI/NSF Standard 61.
- D. *Inlet Water Supply Connection with Filter.*
 - Power Pro, Model 3150 1.5" FNPT (fresh water supply of 30 GPM required)
or approved equal.
- E. *Inlet Solenoid Valve.* Opens and closes on command when the system receives a signal.
- F. *Rotometer.* Used to provide a signal for measuring the flow of the fresh water-dissolving stream.
- G. *Flow Control Valve.* PVC diaphragm valve mounted in line with the rotometer allows operator to adjust flow of water-dissolving stream.
- H. *Solution Tank.* Made of medium-density polyethylene. Capacities:
 - Power Pro, Model 3150 30 gallons
or approved equal.
- I. *Primary Solution Tank Level Control.* Made from PVC and 316L stainless steel, this float valve meters the tablet by-pass flow. The by-pass stream balances the variation in the water-dissolving stream. The float valve opens or closes to maintain the pump rate as it is manually throttled.
- J. *Secondary High/Low Level Solution Tank Control.* Prevents the solution tank from overflowing. High level: when activated, a switch opens the circuit to the solenoid valve, causing the valve to close. Low level: shuts pump down preventing cavitation. A restart timer prevents the pump from “chattering”.

- K. *Solution Delivery Pump.* Delivers chlorinated solution into a pressurized stream. A Grundfos vertical multi-stage centrifugal pump is provided, or equal.
- L. *Solution Injection Pump Air Bleed.* Used to prime the pump at start-up, or at any time, if necessary. Also functions as a recycle line for tank cleaning.
- M. *Primary Backflow Prevention.* A PVC Ball check valve prevents reverse flow of water into the system.
- N. *Discharge Control Valve (manual).* Used to balance system output water flow with system input water flow.
- O. *Outlet Connection*
 - Power Pro, Model 3150 **1.5" FNPT**
or approved equal.
- P. *Nema 4X Electrical Enclosures, UL listed.*
- Q. *Aluminum Frame, Type 6061-T.*
- R. ***Inlet Pressure Regulator.*** Brass pressure regulator installed for water inlet pressure above 70 PSIG.
- S. *Inlet Pressure Gauge.* Gauge reading 0 to 100 PSIG installed for inlet pressure above 70 PSIG.
- T. *Weight Scale.* Load cell factory-installed under the chlorinator to measure tablet weight.
- U.
- V. *Residual Analyzer.* The Chlorination system shall be equipped with a chlorine residual analyzer to monitor chlorine residual and have the ability to increase/decrease the chlorine content based on the readings.

2.2 ELECTRICAL REQUIREMENTS

- A. Each system to be designed per available power. Two electrical circuits are required for operation: (1) dry contact or 110v 5 amp control, and (1) pump circuit sized for the pump/motor provided, and shall operate on 460 VAC 3 phase power.

2.3 SPARE PARTS

- B. **None**

PART 3 - EXECUTION

3.1 WARRANTY

- A. The manufacturer shall guarantee in writing that this unit, if operated in accordance with written instructions given and accepted by the Owner, will perform in complete accord with the specifications. All components will be warranted against manufacturers' defects for twelve (12) months from its original installation date or thirteen (13) months from its AXIALL shipment date, whichever first occurs. Only Accu-Tab® SI tablets can be used in these chlorination systems. Use of any other tablet will invalidate the warranty.


END OF SECTION


100 YR 24 HR STORM EVENT DESIGN CRITERIA

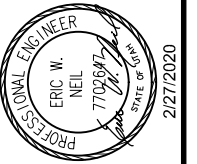
- VOLUME REQUIRED = 5,273 CF
- VOLUME PROVIDED = 14,235 CF
- TOP OF RETENTION BASIN ELEVATION = 4443.0 FT
- BOTTOM OF RETENTION BASE ELEVATION = 4440.0 FT
- FREEBOARD ELEVATION = 4442.0 FT
- PEAK FLOW INTO BASIN = 1.66 CFS

LEGEND

45.00 = ELEVATION 4445.00

 APPROXIMATE LIMIT OF STRUCTURAL BACKFILL REQUIRED TO INFILL THE EXISTING EXCAVATION. TOTAL FILL DEPTH WILL BE 4'-4" NOT INCLUDING 4" OF LANDSCAPE GRAVEL. STRUCTURAL FILL SHALL BE STEPPED AGAINST ALL EXISTING SIDES PER THE GEOTECHNICAL INVESTIGATION RECOMMENDATIONS. THE SLOPE OF THE NEW BASIN SHALL BE 3:1. STRUCTURAL FILL MUST MEET THE REQUIREMENTS OF THE GEOTECHNICAL INVESTIGATION.

 STRUCTURAL BACKFILL REQUIRED TO INFILL THE INNER AREA OF THE NEW BASIN. DEPTH IS APPROXIMATELY 12 INCHES NOT INCLUDING 8" OF LANDSCAPE GRAVEL. STRUCTURAL FILL MUST MEET THE REQUIREMENTS OF THE GEOTECHNICAL INVESTIGATION.



NO.	DATE	REV. BY	DESCRIPTION
1	3/20	EN	ADDENDUM NO. 1

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

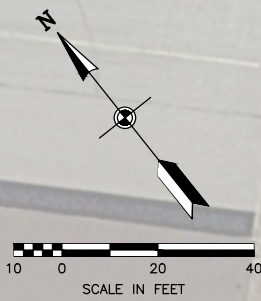
REVIEW
CHECKED B. MAYERS
APPROVED E. NEIL

DESIGN
DESIGN N. ROGERS
DRAWN J. COLLINS

CIVIL
OVERALL SITE & GRADING PLAN

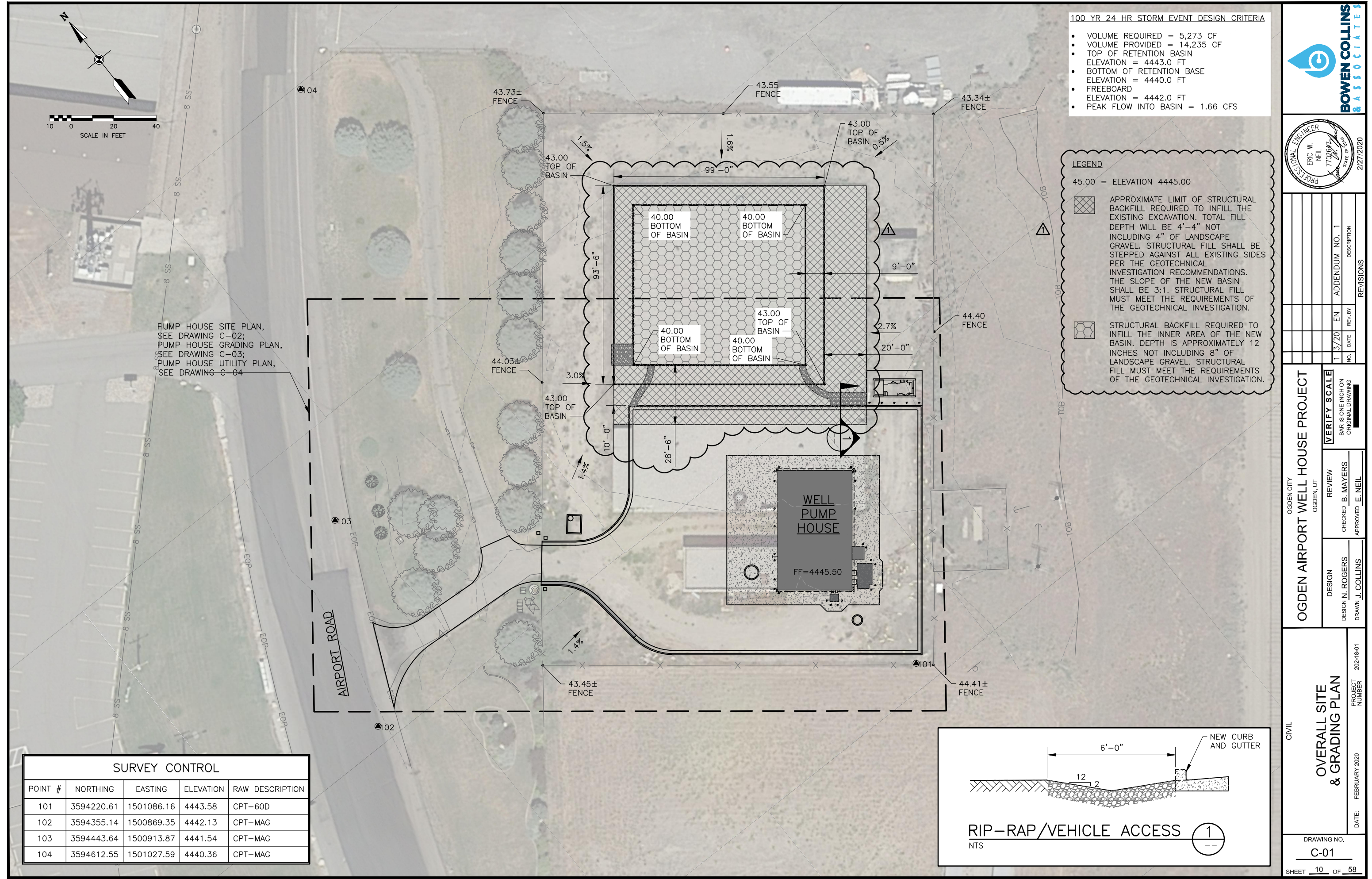
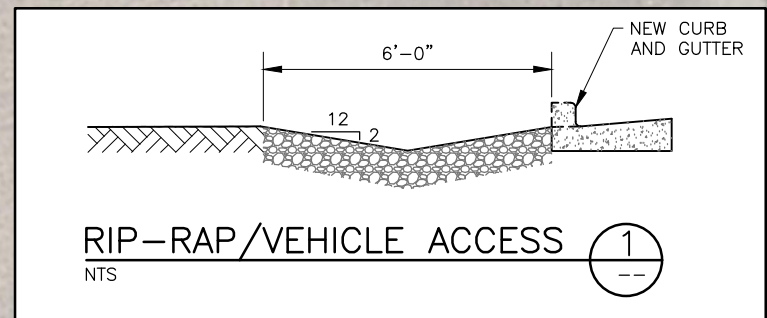
DATE: FEBRUARY 2020
PROJECT NUMBER: 202-18-01

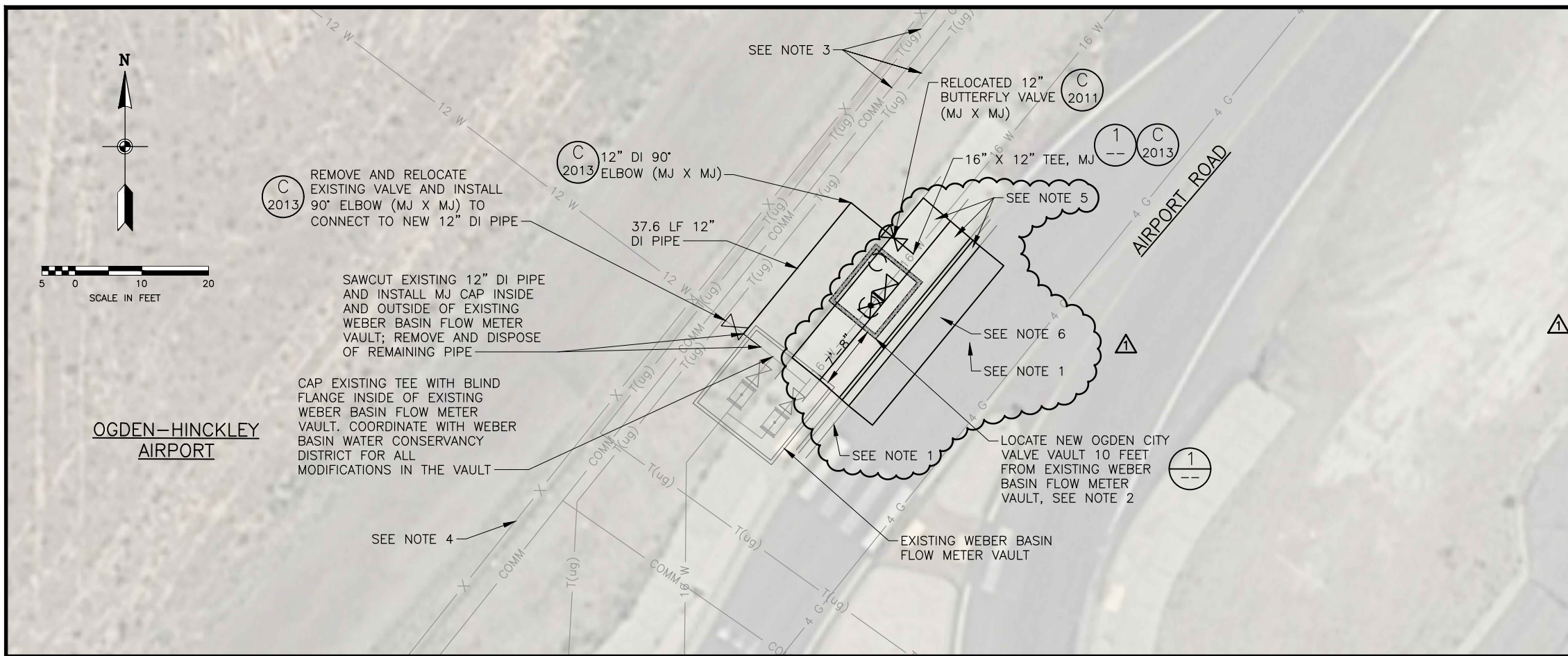
DRAWING NO. C-01
SHEET 10 OF 58



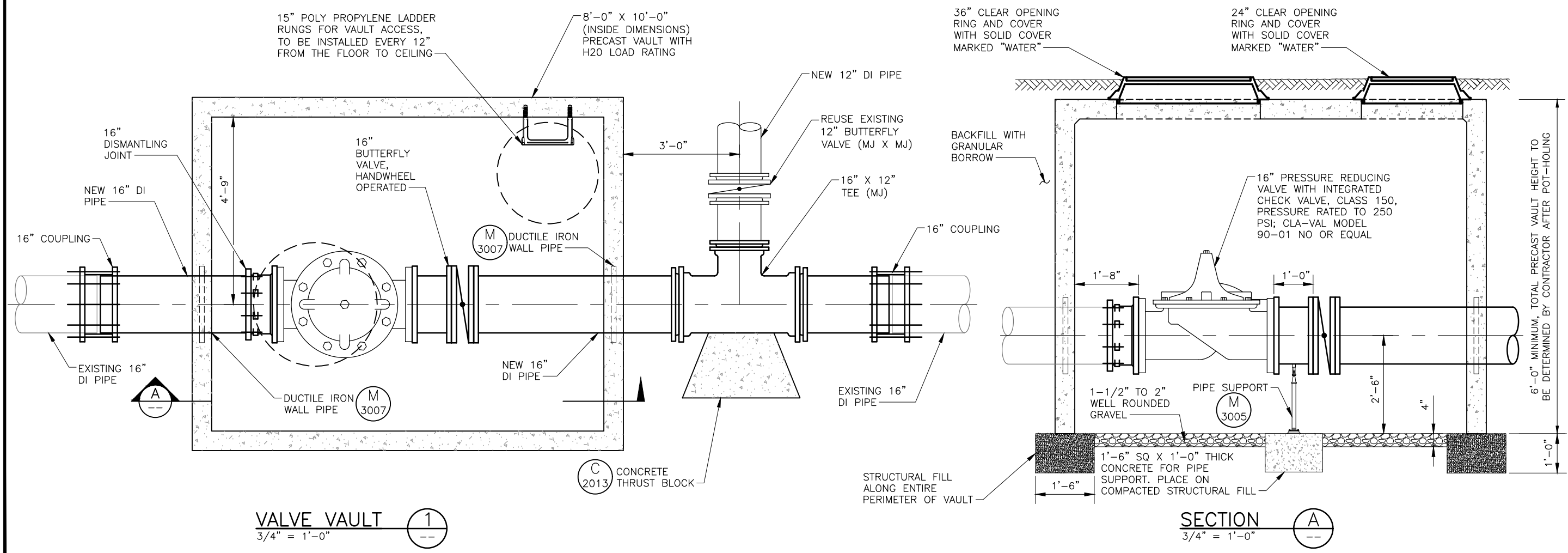
PUMP HOUSE SITE PLAN, SEE DRAWING C-02;
PUMP HOUSE GRADING PLAN, SEE DRAWING C-03;
PUMP HOUSE UTILITY PLAN, SEE DRAWING C-04

SURVEY CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	RAW DESCRIPTION
101	3594220.61	1501086.16	4443.58	CPT-60D
102	3594355.14	1500869.35	4442.13	CPT-MAG
103	3594443.64	1500913.87	4441.54	CPT-MAG
104	3594612.55	1501027.59	4440.36	CPT-MAG





- NOTES:**
1. PRESERVE AND PROTECT EXISTING ASPHALT AND CURB AND GUTTER.
 2. PRIOR TO PURCHASING NEW PRECAST VAULT, CONTRACTOR TO POT-HOLE AT NEW VAULT LOCATION TO DETERMINE ELEVATION OF EXISTING WATER LINE.
 3. PRESERVE AND PROTECT EXISTING UTILITIES.
 4. PRESERVE AND PROTECT EXISTING FENCE.
 5. REMOVE AND REPLACE APPROXIMATELY 30 FEET OF CURB AND GUTTER, SIDEWALK AND STAMPED CONCRETE PARK STRIP TO INSTALL THE VAULT. NEW CURB AND GUTTER, 4" THICK SIDEWALK AND 4" THICK STAMPED CONCRETE PARK STRIP TO MATCH EXISTING WITH 6" THICK BASE COURSE.
 6. SAWCUT, REMOVE, DISPOSE OF AND REPLACE THE ASPHALT DAMAGED DURING CONSTRUCTION TO INSTALL THE NEW VAULT. ASPHALT THICKNESS SHALL MATCH EXISTING BUT NO LESS THAN 4" THICK. ASPHALT SHALL BE PG 58-28 OVER 8" COMPACTED BASE COURSE.
 7. PROVIDE TRAFFIC CONTROL DURING CONSTRUCTION.



BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER
ERIC W. NEIL
7702947
STATE OF UTAH
2/27/2020

NO.	DATE	REV. BY	DESCRIPTION
1	3/20	EN	ADDENDUM NO. 1

OGDEN CITY
OGDEN, UT

OGDEN AIRPORT WELL HOUSE PROJECT

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN: E. NEIL
CHECKED: B. MAYERS
DRAWN: N. ROGERS

REVIEW: E. NEIL
APPROVED: E. NEIL

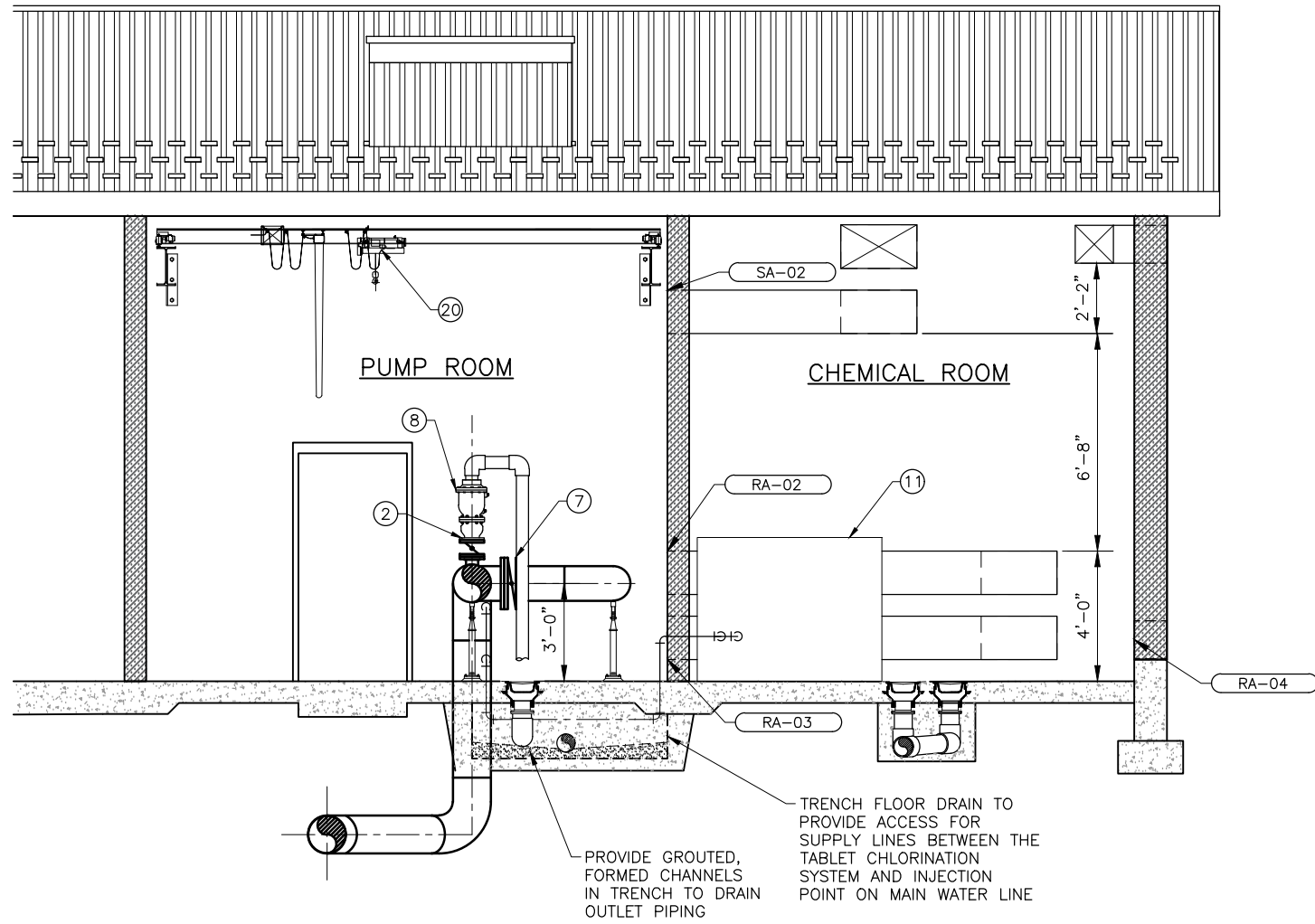
CIVIL

VAULT UTILITY PLAN

DATE: FEBRUARY 2020
PROJECT NUMBER: 202-18-01

DRAWING NO. C-06

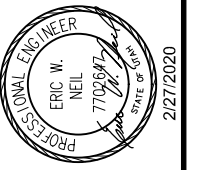
SHEET 15 OF 58



SECTION **B**
 $\frac{3}{8}'' = 1'-0''$ M-01

VALVE AND EQUIPMENT SCHEDULE

NO.	DESCRIPTION	SIZE	JT TYPE	REMARKS
①	VERTICAL TURBINE PUMP	14-IN DISCHARGE	FL	2,725 GPM @ 690 TDH, MAX @ 60Hz
②	BUTTERFLY VALVE	4-INCH	FL	MANUAL LEVER
③	AIR RELEASE VALVE	1-INCH	NPT	VAL-MATIC MODEL 25.6 OR APPROVED EQUAL
④	CHECK VALVE	14-INCH	FL	SLANTING OR TILTED DISC TYPE, APCO MODEL 800 OR VALMATIC MODEL 9808
⑤	PUMP CONTROL VALVE	10-INCH	FL	GLOBE STYLE DEEP WELL CLA-VAL MODEL 61-02, FUSION BONDED EPOXY LINED AND COATED, SST INTERNAL TRIM, TUBES, AND FITTINGS. EQUIPPED WITH ANTICAVITATION TRIM. CONTROL VALVE SHALL BE SUPPLIED WITH 2 LIMIT SWITCHES.
⑥	MAGNETIC FLOW METER	14-INCH	FL	SIEMENS WITH WALL MOUNTED TRANSMITTER, SEE ELECTRICAL PLANS
⑦	BUTTERFLY VALVE	14-INCH	FL	HANDWHEEL OPERATED
⑧	WELL SERVICE AIR VALVE	4-INCH	FL	AIR VALVE WITH REGULATED-EXHAUST DEVICE, VALMATIC MODEL 104SS OR EQUAL
⑨	EMERGENCY EYE WASH STATION	--	--	WALL MOUNTED EMERGENCY EYEWASH STATION (GUARDIAN OR EQUAL). DRAIN TO FLOOR DRAIN
⑩	PRESSURE INDICATING TRANSMITTER/SWITCH	--	--	PRESSURE TRANSMITTER SHALL HAVE LOCAL READOUT
⑪	TABLET CHLORINATION UNIT	--	--	ACCU-TAB POWERPRO 3150 SERIES OR APPROVED EQUAL; UNIT SHALL HAVE BUILT IN TABLET WEIGHT SCALE, 150 LB TABLET CAPACITY, 30 GALLON SOLUTION TANK, PIPING, PUMP, ELECTRICAL PANELS AND ALL OTHER REQUIRED COMPONENTS FOR A COMPLETE OPERABLE SYSTEM
⑫	ELECTRIC UNIT HEATER	5 KW	--	HEATER TO BE WALL MOUNTED, SEE DRAWING H-01 FOR HVAC EQUIPMENT SCHEDULE
⑬	CHLORINE RESIDUAL ANALYZER	0.1-5.0 MG/L	--	PROVIDE PRESSURE REDUCER, BRASS BALL VALVES, AND SMOOTH NOSE SAMPLING TAP; HACH CL17 OR APPROVED EQUAL; ROUTE DRAIN TO FLOOR DRAIN BENEATH INSTRUMENT
⑭	FLAPGATE VALVE	4-INCH	--	WATERMAN FLAPPER VALVE, MODEL F-10
⑮	BUTTERFLY VALVE	12-INCH	--	HANDWHEEL OPERATED
⑯	TURBIDIMETER	0-10 NTU	--	HIGH TURBIDITY ALARM SET TO 2.5 NTU, HACH TU5300 OR APPROVED EQUAL; ROUTE DRAIN TO FLOOR DRAIN BENEATH INSTRUMENT
⑰	TOTAL MANGANESE ANALYZER	0-1 MG/L	--	HACH EZ2000 COLORIMETRIC ANALYZER FOR TOTAL MANGANESE; ROUTE DRAIN TO FLOOR DRAIN BENEATH INSTRUMENT
⑱	POLYPHOSPHATE DOSING SYSTEM	0-6 GPD	--	POLYPHOSPHATE SYSTEM FOR UP TO 6 GAL/DAY OF 24-30% POLYPHOSPHATE WITH 20:1 TURN DOWN. STORAGE TANK CAPACITY TO BE 250 GALLONS MINIMUM. CONTRACTOR SHALL FURNISH AND INSTALL ALL COMPONENTS, PIPE, FITTINGS, VALVES, ADAPTERS, SUPPORTS, AND BRACKETS TO MAKE A COMPLETE AND FUNCTIONAL SYSTEM. COORDINATE DOSING AT SITE WITH OWNER. SEE DETAIL M/3015.
⑲	PRESSURE INDICATING TRANSMITTER	--	--	PRESSURE TRANSMITTER SHALL HAVE LOCAL READOUT
⑳	BRIDGE CRANE	--	--	THE HOIST SHALL BE ABLE TO SUPPORT 2,000 LBS AND BE EQUIPPED WITH MOTORIZED TROLLEY AND 1-TON MONORAIL BRIDGE. THE WIRE ROPE REEVING SHALL BE 2-PART DOUBLE, CROSS MOUNTED OR SIMILAR TYPE. SEE SPECIFICATIONS FOR DETAILS.
㉑	REDUCED PRESSURE ASSEMBLY	1½-INCH	THRD	FEBCO OR APPROVED EQUAL



NO.	DATE	REV. BY	DESCRIPTION
1	3/20	EN	ADDENDUM NO. 1

OGDEN AIRPORT WELL HOUSE PROJECT
 OGDEN CITY, OGDEN, UT

VERIFY SCALE
 THIS IS ONE INCH ON ORIGINAL DRAWING

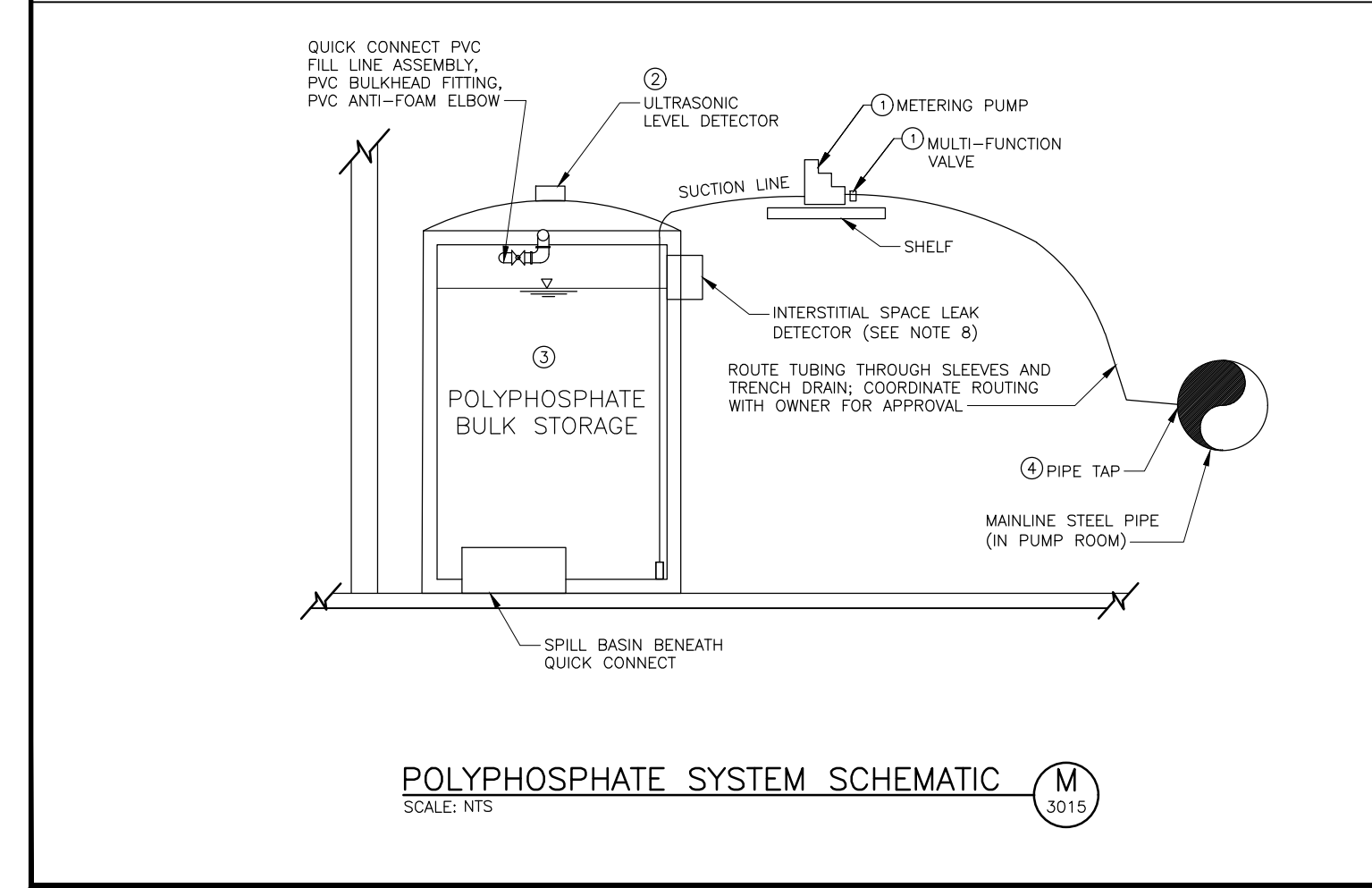
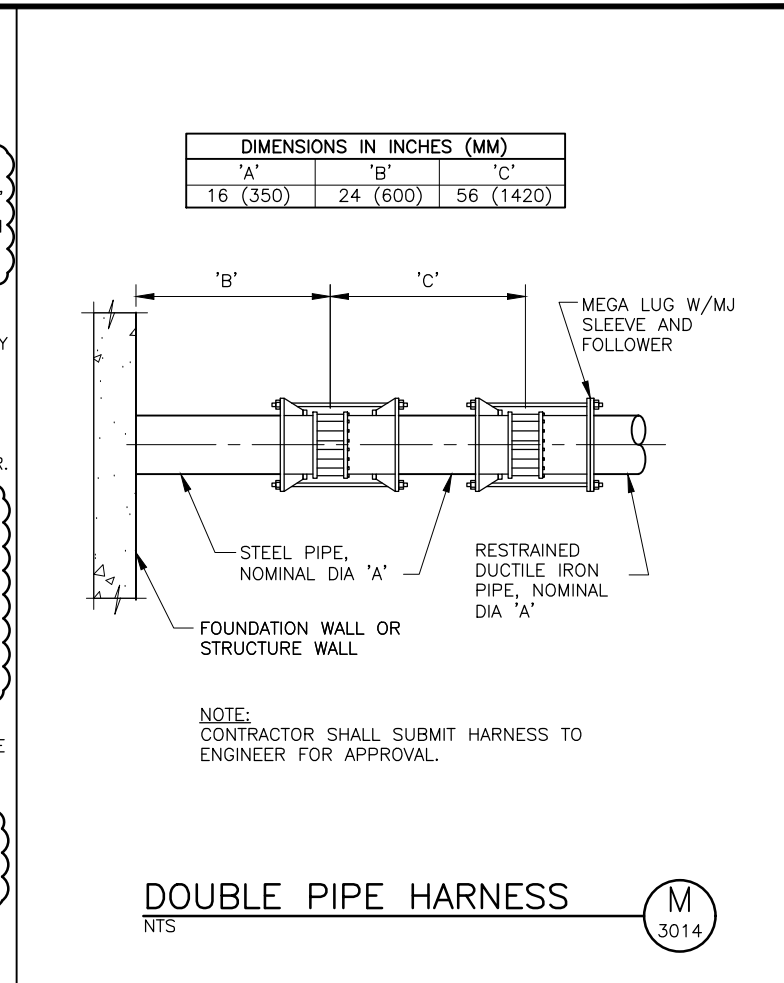
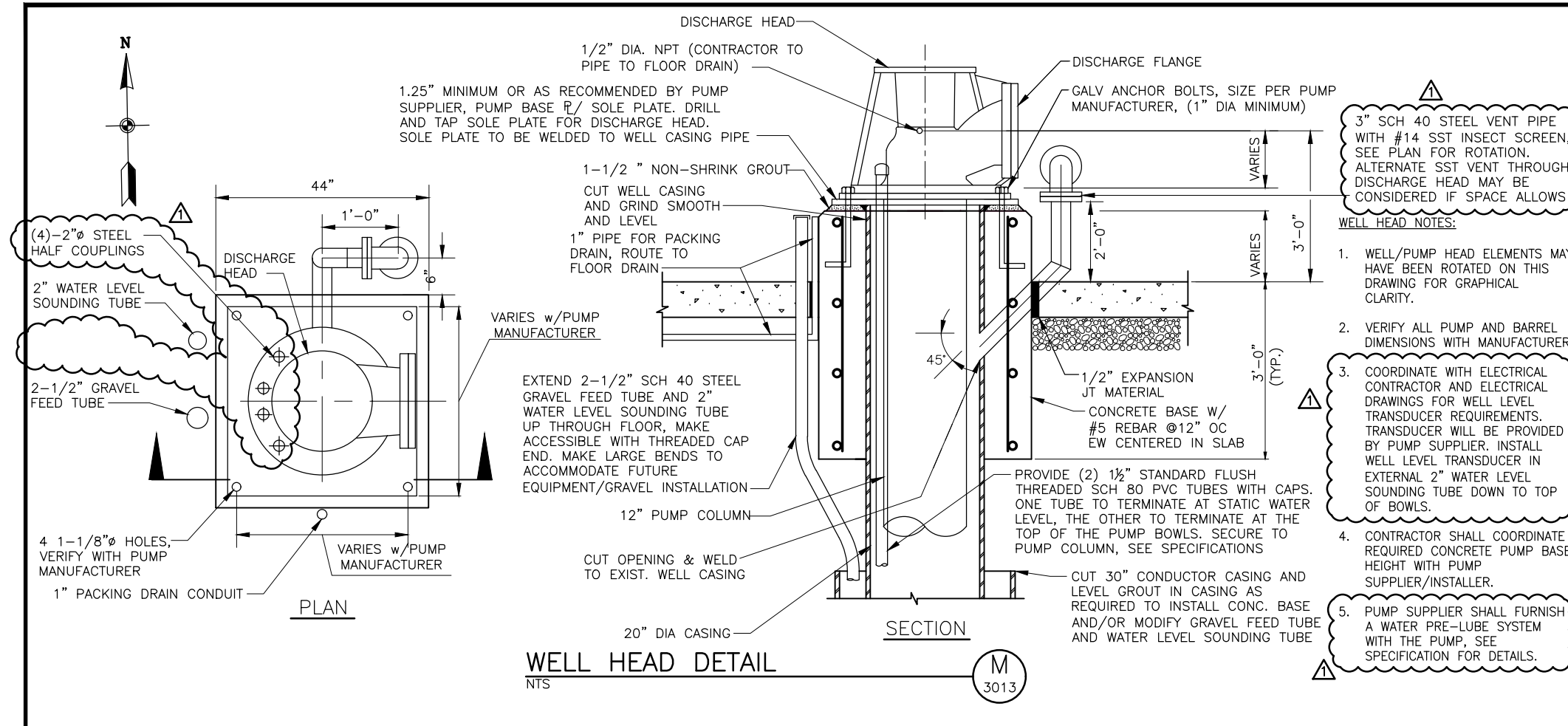
DESIGN: E. NEIL
 DRAWN: J. COLLINS

REVIEW: B. MAYERS
 CHECKED: E. NEIL

MECHANICAL SECTION - 2

DATE: FEBRUARY 2020
 PROJECT NUMBER: 202-18-01

P:\Ogden City\202-18-01 Ogden Airport Well Design Phase\Drawings\Shf\2021801_M-03.dwg Plotted: 3/24/2020 4:25 PM By: Eric Neil



LIST OF EQUIPMENT			
ITEM NO.	ITEM	SIZE	DESCRIPTION
1	METERING PUMP SYSTEM WITH MULTI-FUNCTION VALVE AND PIPING		GRUNDFOS DIGITAL DOSING PUMP AR CONTROL (MODEL DDA 7.5-16 AR-PV/V/C-F-31U7U7BG) TUBING AND FOOT VALVE; MULTI-FUNCTION VALVE FOR BACK PRESSURE, PRESSURE RELIEF AND ANTI-SIPHON PROTECTION; INJECTION CHECK VALVE. SUPPORT ON FIBERGLASS OR HDPE SHELF.
2	ULTRASONIC LEVEL DETECTOR		FLOW LINE LU27-00 OR APPROVED EQUAL.
3	POLYPHOSPHATE STORAGE TANK SYSTEM	SEE MECHANICAL PLANS	DUAL WALLED SYSTEM WITH INTERSTITIAL LEAK DETECTION. ASSMANN IMT SERIES OR APPROVED EQUAL. PVC FILL LINE ASSEMBLY.
4	TAP FOR POLYPHOSPHATE INJECTOR	1"	INJECTOR WITH CHECK VALVE, CORP STOP AND CHAIN ASSEMBLY

- NOTES:
- THIS SCHEMATIC INDICATES THE MAJOR REQUIRED COMPONENTS FOR A POLYPHOSPHATE SYSTEM FOR UP TO 6 GAL/DAY OF 24-30% POLYPHOSPHATE WITH 20:1 TURN DOWN. CONTRACTOR SHALL FURNISH AND INSTALL ALL COMPONENTS, PIPE, FITTINGS, VALVES, ADAPTERS, SUPPORTS, AND BRACKETS TO MAKE A COMPLETE AND FUNCTIONAL SYSTEM. COORDINATE DOSING AT SITE WITH OWNER.
 - PROVIDE NAMED COMPONENTS OR APPROVED EQUAL.
 - PROVIDE BULKHEADS, FITTINGS, REDUCERS, AND SEALS AS REQUIRED TO MAKE CONNECTIONS. ALL MATERIALS SHALL BE SUITABLE FOR POLYPHOSPHATE.
 - ALL PIPE, FITTINGS AND VALVES SHALL BE POLYETHYLENE OR OTHER SUITABLE MATERIALS RECOMMENDED BY MANUFACTURER AND APPROVED BY OWNER AND ENGINEER.
 - ALL NON POLYETHYLENE PIPE, VALVES AND FITTINGS SHALL BE AS RECOMMENDED BY SUPPLIER FOR CHEMICAL.
 - PROVIDE TUBING, FITTINGS AND BRACKETS TO ROUTE AND SECURE THE TUBING AS REQUIRED AND RECOMMENDED BY MANUFACTURER.
 - MOUNT COMPONENTS TO WALL AND SECURE AND SUPPORT AS REQUIRED WITH FIBER GLASS OR OTHER APPROVED PIPE HANGERS.
 - LEAK DETECTOR SHALL HAVE NEMA 4X ENCLOSURE, AUDIBLE ALARM, DUAL PROBE, AND ALARM LIGHT. 120V AC FEED WILL BE PROVIDED TO ENCLOSURE, IF REQUIRED CONTRACTOR TO PROVIDE 24VDC POWER SUPPLY.

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER
ERIC W. NEIL
STATE OF UTAH
7702847
2/27/2020

NO.	DATE	REV. BY	DESCRIPTION
1	3/20	EN	ADDENDUM NO. 1

OGDEN AIRPORT WELL HOUSE PROJECT
OGDEN, UT

DESIGN: E. NEIL
DRAWN: N. ROGERS
CHECKED: B. MAYERS
APPROVED: E. NEIL

MECHANICAL
GENERAL MECHANICAL DETAILS - 3

DATE: FEBRUARY 2020
PROJECT NUMBER: 202-18-01

DRAWING NO. GM-03

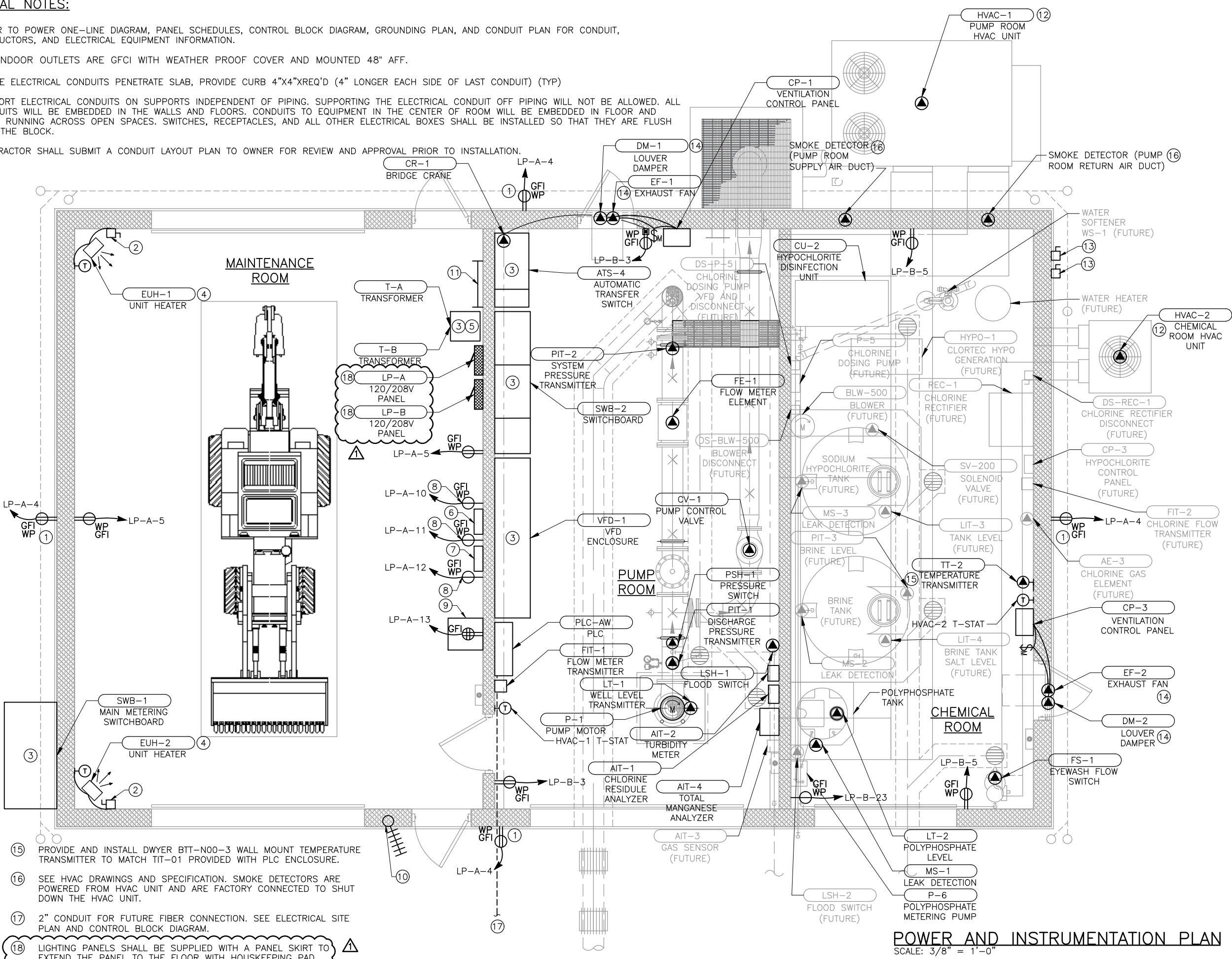
SHEET 39 OF 58

GENERAL NOTES:


1. REFER TO POWER ONE-LINE DIAGRAM, PANEL SCHEDULES, CONTROL BLOCK DIAGRAM, GROUNDING PLAN, AND CONDUIT PLAN FOR CONDUIT, CONDUCTORS, AND ELECTRICAL EQUIPMENT INFORMATION.
2. ALL INDOOR OUTLETS ARE GFCI WITH WEATHER PROOF COVER AND MOUNTED 48" AFF.
3. WHERE ELECTRICAL CONDUITS PENETRATE SLAB, PROVIDE CURB 4"x4"xREQ'D (4" LONGER EACH SIDE OF LAST CONDUIT) (TYP)
4. SUPPORT ELECTRICAL CONDUITS ON SUPPORTS INDEPENDENT OF PIPING. SUPPORTING THE ELECTRICAL CONDUIT OFF PIPING WILL NOT BE ALLOWED. ALL CONDUITS WILL BE EMBEDDED IN THE WALLS AND FLOORS. CONDUITS TO EQUIPMENT IN THE CENTER OF ROOM WILL BE EMBEDDED IN FLOOR AND AVOID RUNNING ACROSS OPEN SPACES. SWITCHES, RECEPTACLES, AND ALL OTHER ELECTRICAL BOXES SHALL BE INSTALLED SO THAT THEY ARE FLUSH WITH THE BLOCK.
5. CONTRACTOR SHALL SUBMIT A CONDUIT LAYOUT PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

KEY NOTES:

1. OUTSIDE GFCI OUTLETS WITH WHILE-IN-USE WEATHER PROOF COVER, HUBBLE, METALLIC WP26E OR WP26EH. MOUNT OUTLET 48" MIN ABOVE FINISH GRADE.
2. 480V, 30A, NEMA 1 DISCONNECT FOR UNIT HEATER.
3. INSTALL HOUSEKEEPING PAD UNDER VFD, ATS, SWITCHBOARDS, AND TRANSFORMER. SEE STRUCTURAL DETAIL S-4113 TYPE A ON DRAWING GS-03.
4. ELECTRIC UNIT HEATER, SEE MECHANICAL AND HVAC DRAWINGS.
5. TRANSFORMERS ARE STACKED. MOUNT T-A AT LEAST 2' ABOVE T-B. PROVIDE AND INSTALL UNISTRUT SUPPORT FRAME. SEE DETAIL E-5006.
6. DOOR ACCESS PANEL. SEE CONDUIT PLAN AND DETAILS E-5109 AND E-5110.
7. BURGLAR ALARM PANEL AND RADIO TRANSMITTER. SEE CONDUIT PLAN AND DETAILS E-5109 AND E-5110.
8. PROVIDE AND INSTALL (3) SINGLE GANG, 120V RECEPTACLES FOR DOOR ACCESS PANEL, BURGLAR ALARM PANEL, AND RADIO ALARM TRANSMITTER. SEE DETAIL E-5109, KEY NOTE #5 AND E-5110, KEY NOTE #4.
9. NETWORK CABINET, PROVIDED BY OWNER. PROVIDE AND INSTALL DOUBLE GANG W/ (4) 120V RECEPTACLES INSIDE CABINET. SEE DETAIL E-5109, KEY NOTE #4.
10. P2P AND CAT6 CABLE, PROVIDED AND INSTALLED BY OWNER. PROVIDE AND INSTALL 1" CONDUIT WITH PULL STRING FROM NETWORK CABINET TO LOCATION SHOWN ON ROOF. SEE DETAIL E-5017 FOR ADDITIONAL INSTRUCTIONS.
11. GROUND BAR. FOR CONNECTIONS, SEE DETAIL E-5016.
12. HVAC UNITS, SEE MECHANICAL AND HVAC DRAWINGS. PROVIDE AND INSTALL 3/4" CONDUIT W/ PULL STRING FROM EACH HVAC UNIT TO THERMOSTAT LOCATION INSIDE BUILDING. COORDINATE WITH HVAC.
13. 480V, 100A, NEMA 3R DISCONNECT FOR HVAC-1 AND 240V, 2P, 60A, NEMA 3R DISCONNECT FOR HVAC-2.
14. EXHAUST FANS AND DAMPERS, SEE DETAIL E-5105. ALSO, SEE HVAC AND MECHANICAL.
15. PROVIDE AND INSTALL DWYER BTT-N00-3 WALL MOUNT TEMPERATURE TRANSMITTER TO MATCH TIT-01 PROVIDED WITH PLC ENCLOSURE.
16. SEE HVAC DRAWINGS AND SPECIFICATION. SMOKE DETECTORS ARE POWERED FROM HVAC UNIT AND ARE FACTORY CONNECTED TO SHUT DOWN THE HVAC UNIT.
17. 2" CONDUIT FOR FUTURE FIBER CONNECTION. SEE ELECTRICAL SITE PLAN AND CONTROL BLOCK DIAGRAM.
18. LIGHTING PANELS SHALL BE SUPPLIED WITH A PANEL SKIRT TO EXTEND THE PANEL TO THE FLOOR WITH HOUSEKEEPING PAD.



POWER AND INSTRUMENTATION PLAN
SCALE: 3/8" = 1'-0"



BOWEN COLLINS & ASSOCIATES

REGISTERED PROFESSIONAL ENGINEER
DOUGLAS MAX STEWART
No. 173512
STATE OF UTAH
2/27/2020

REVISIONS	
NO.	DESCRIPTION
1	13/20 EN ADDENDUM NO. 1

OGDEN AIRPORT WELL HOUSE PROJECT

OGDEN CITY, UTAH

DESIGN	REVIEW	VERIFY SCALE
DESIGN: J. LAKE DRAWN: J. LAKE	CHECKED: D. YOUNGSTROM APPROVED: D. STEWART	BAR IS ONE INCH ON ORIGINAL DRAWING

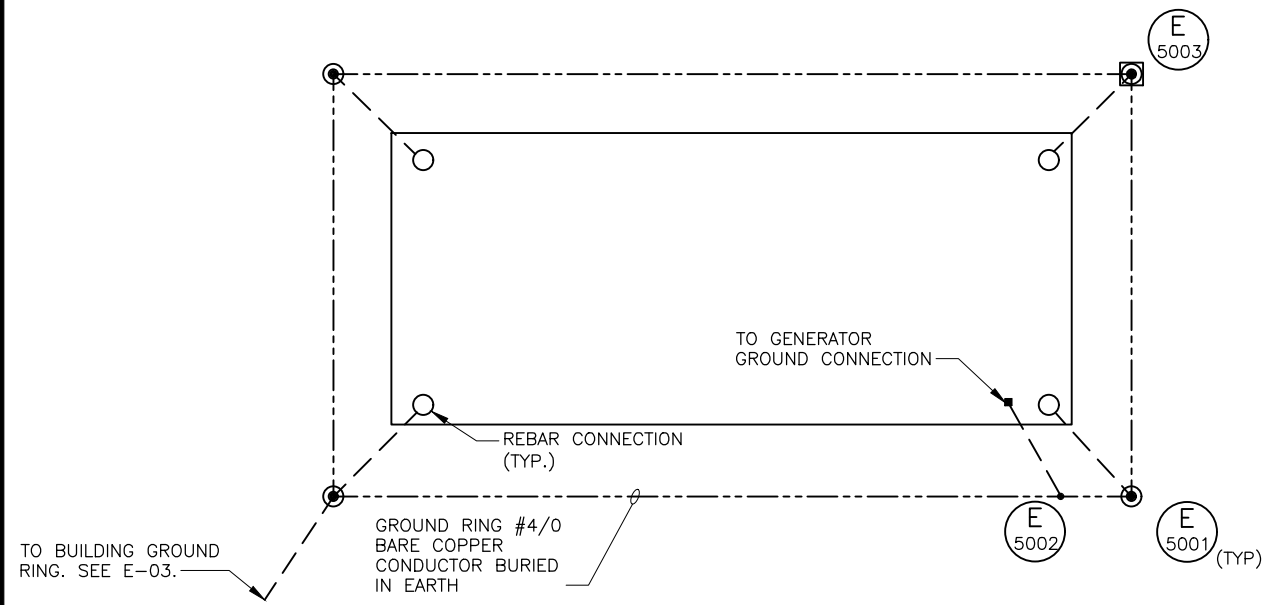
POWER AND INSTRUMENTATION PLAN

E-03

DATE: FEBRUARY 2020 PROJECT NUMBER: 202-18-01

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NOTES
 1. REFER TO GENERAL NOTES ON DRAWING E-03 FOR GROUND GRID INFORMATION.



GENERATOR GROUND RING DETAIL E 5014
 SCALE: NTS

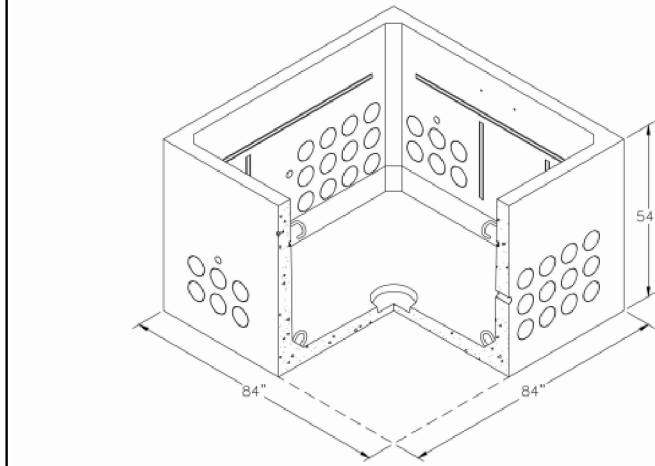
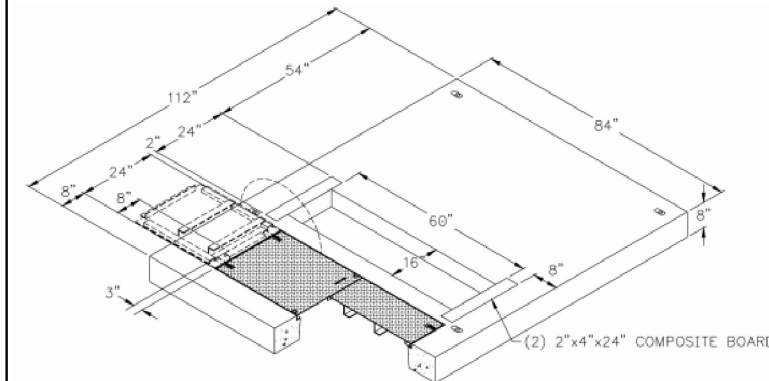
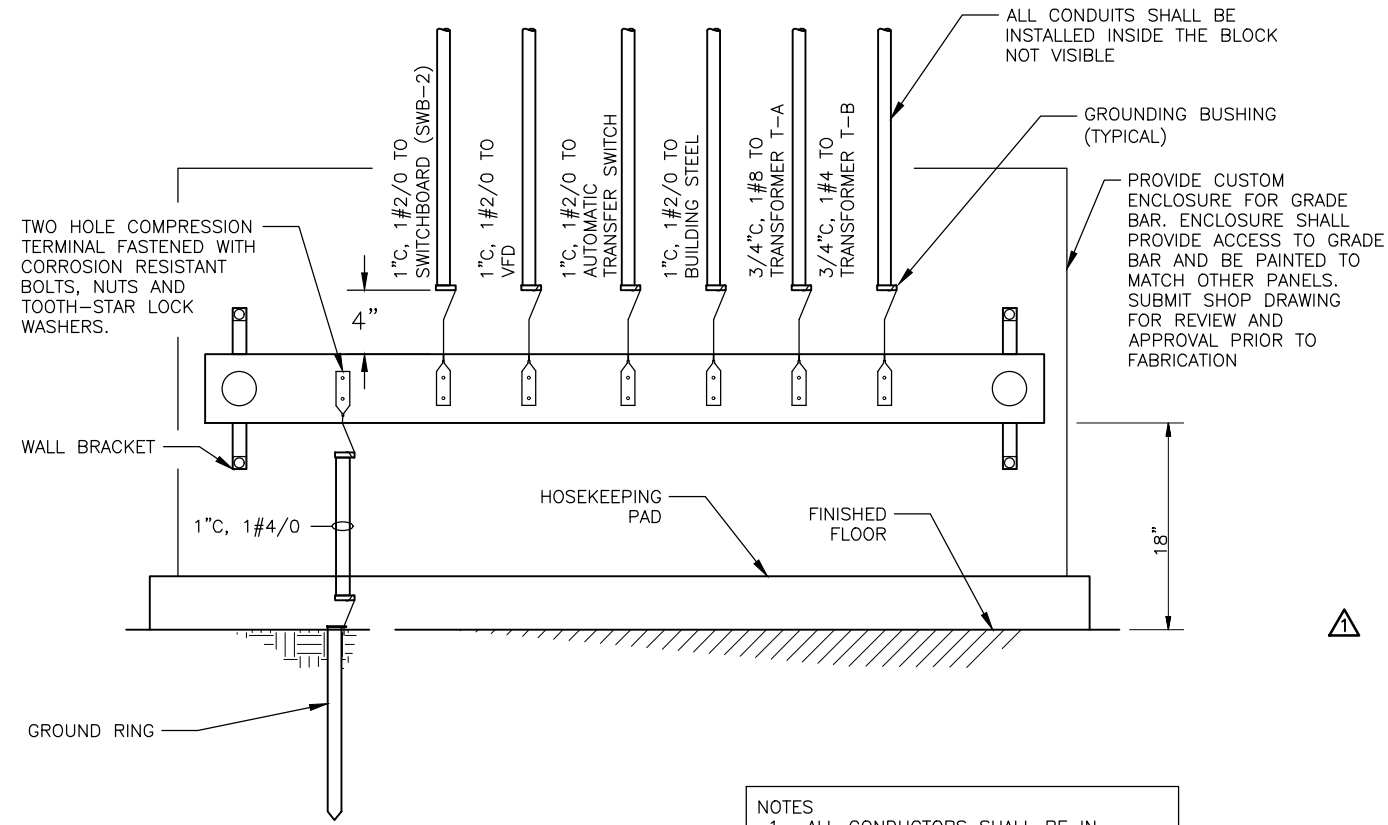


Figure 3—Padvault for 2.4-25 kV, Three-Phase, 1000-2500 kVA Transformer (SI#7992958)

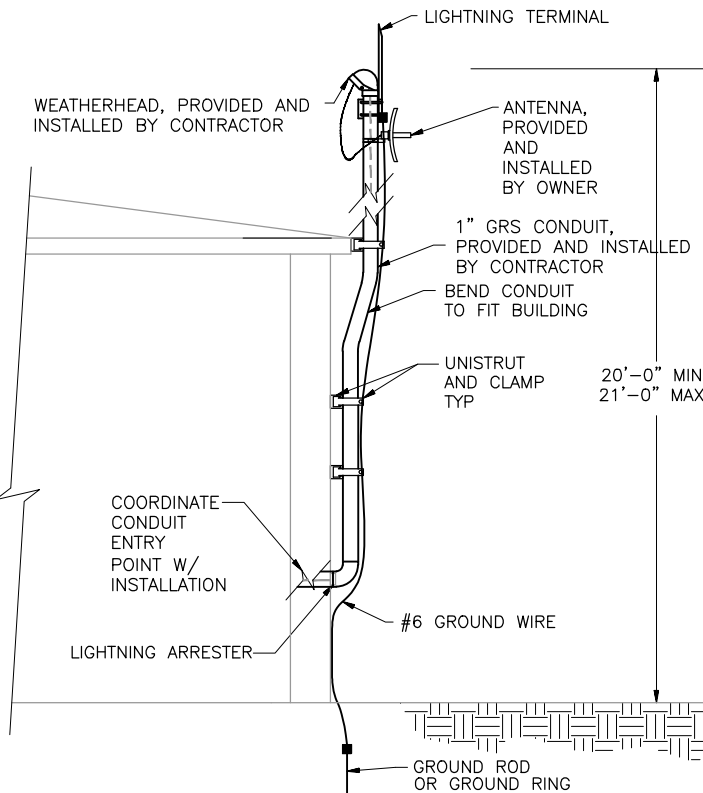
NOTE
 1. REFER TO ROCKY MOUNTAIN POWER'S PUBLICATION "ZG 521 PADVAULT - THREE-PHASE TRANSFORMER," FIGURE 3.

POWER TRANSFORMER PAD DETAIL E 5015
 SCALE: NTS



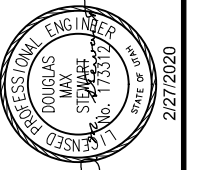
NOTES
 1. ALL CONDUCTORS SHALL BE IN CONDUIT, UNLESS SHOWN OTHERWISE
 2. ALL CONDUITS SHALL HAVE A GROUNDING BUSHING AT EACH END.

GROUND BAR DETAIL E 5016
 SCALE: NTS



ANTENNA SUPPORT DETAIL E 5017
 SCALE: NTS

NOT USED E 5018
 SCALE: NTS



NO.	DATE	REV. BY	DESCRIPTION
1	3/20	EN	ADDENDUM NO. 1

OGDEN AIRPORT WELL HOUSE PROJECT
 OGDEN, UT

DESIGN	REVIEW	CHECKED	APPROVED
J. LAKE	D. YOUNGSTROM	D. YOUNGSTROM	D. STEWART

GENERAL ELECTRICAL DETAILS - 3
 PROJECT NUMBER: 202-18-01
 DATE: FEBRUARY 2020