

RESOLUTION NO. 22

SERIES 2015

RESOLUTIONS OF THE CRESTED BUTTE TOWN COUNCIL APPROVING THE AWARD OF THE CONSTRUCTION CONTRACT BETWEEN THE TOWN OF CRESTED BUTTE AND PROFESSIONAL CONTRACTORS, INC. IN AN AMOUNT NOT TO EXCEED \$250,000.00 FOR THE CONSTRUCTION OF A STORAGE BUILDING LOCATED AT THE TOWN PUBLIC WORKS YARD

WHEREAS, the Town of Crested Butte, Colorado (the "Town") is a home rule municipality duly and regularly organized and now validly existing as a body corporate and politic under and by virtue of the Constitution and laws of the State of Colorado;

WHEREAS, the Town staff recommends, after conducting a competitive bid process, to award the construction contract for the storage building located in the Town Public Works Yard (the "Project") to Professional Contractors, Inc. (the "Contractor");

WHEREAS, following the Town staff recommendation, the Town Council desires to award the construction contract for the Project to Contractor pursuant to the terms and conditions for the performance of the Project set forth in the contract attached to these Resolutions; and

WHEREAS, the Town Council hereby finds that it is in the best interest of the health, safety and general welfare of the citizens and visitors of the Crested Butte to award the construction contract for the Project to Contractor, and in connection therewith, adopt and execute the contract referenced herein.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE, COLORADO, THAT:

1. **Findings**. The Town Council hereby finds that entering into a contract for the construction of the Project with Contractor is in the best interest of the Town.

2. **Approval; Authorization of Town Manager**. Based on the foregoing, the Town Council hereby approves the construction contract with Contractor in substantially the same form as attached hereto as **Exhibit "A"**. Any incremental changes thereto shall be made only following approval by the Town Attorney. The Town Manager is hereby authorized to execute said Contract.

3. **Funding**. The Town Council has allocated \$125,000.00 in its 2015 General Capital Fund for the Project, with the remaining \$125,000.00 for the Project being paid for by Mt. Crested Butte Water and Sanitation District (the "District") pursuant to an intergovernmental agreement entered into by the Town and the District which was approved by the Town Council by way Resolution No. 21, Series 2015.

INTRODUCED, READ AND ADOPTED BEFORE THE TOWN COUNCIL THIS 18^m
DAY OF August, 2015.

TOWN OF CRESTED BUTTE, COLORADO

By: *Aaron J. Huckstep*
Aaron J. Huckstep, Mayor

ATTEST

Lynelle Stanford
Lynelle Stanford, Town Clerk

(SEAL)



EXHIBIT "A"

Construction Contract Documents

[attach here]



Crested Butte

COLO RADO

2015 Crested Butte Vehicle Storage Building

**CONTRACT DOCUMENTS
&
SPECIFICATIONS**

July 2015

Prepared By:

**SGM Inc.
103 W. Tomichi Ave, Suite A
Gunnison, CO 81230
970.641.5355**



TABLE OF CONTENTS

2015 Crested Butte Vehicle Storage Building

<u>BID DOCUMENTS</u>	<u>Page No.</u>
Section 00100 Invitation to Bid.....	1
Section 00200 Bid Notice.....	BD-1
Section 00300 Instructions to Bidders	BD-2
Section 00400 Bid Form.....	BD-9
Section 00500 Non Collusion Affidavit.....	BD-11
Section 00600 Bidder's Certification	BD-12
Section 00700 Bid Bond.....	BD-14

<u>TECHNICAL SPECIFICATIONS</u>	<u>Pages</u>
DIVISION 1	
Section 01000 - General Requirements.....	5 Pages
Section 01010 - Summary of Work.....	5 Pages
Section 01300 - Submittals	7 Pages
Section 01310 - Construction Schedules.....	5 Pages
Section 01320 - Product Delivery, Storage and Handling	2 Pages
Section 01700 - Contract Closeout	6 Pages
DIVISION 2	
Section 02201 - Excavation and Backfill for Structures	9 Pages
Section 02570 – Shallow Utilities	2 Pages
Section 02700 – Finished Grading and Restoration	2 Pages
DIVISION 3	
Section 03300 – Cast-in-place Concrete	9 Pages
DIVISION 8	
Section 08110 - Steel Doors and Frames.....	7 Pages
Section 08361 - Sectional Overhead Doors.....	7 Pages
DIVISION 13	
Section 13120 - Prefabricated Metal Building.....	5 Pages
<u>EXHIBITS</u>	
Exhibit A - Standard Form of Construction Contract.....	<u>Pages</u> 7 Pages
Exhibit B - General Conditions to the Construction Contract.....	48 Pages
Exhibit C - Special Conditions to the Construction Contract.....	1 Page
Exhibit D - Form of Payment and Performance Bond (completed upon award)	5 Pages
Exhibit E - Geotechnical Report.....	14 Pages



BID DOCUMENTS

2015 Crested Butte Vehicle Storage Building



SECTION 00100 INVITATION TO BID

TOWN OF CRESTED BUTTE, COLORADO

DATE: July 23, 2015

Project description: The design per local building codes and construction of a 5 vehicle bay pre-manufactured steel building, including the excavation and preparation of subgrade and erection of building and utility connections.

Project Manager: Rodney Due, Public Works Director

Sealed bids will be received at the reception desk at the Town of Crested Butte, Colorado, at Town Hall, 507 Maroon Avenue, Crested Butte, Colorado 81224 until 1 p.m. on the 7th day of August, 2015, at which time bids will be opened and read aloud. Bids and Bid Security shall be enclosed in a sealed envelope and addressed to the Town Manager, Town of Crested Butte, and marked "WWTP Vehicle Storage Building." The entire Bid Packet shall be submitted with the proposal.

All Bidders are invited to attend a pre-bid meeting and inspection at 1 p.m., July 29, 2015, at the Crested Butte Wastewater Treatment Facility 800 Butte Avenue, Crested Butte, Colorado.

Cost of electronic Bid documents and Specifications: \$0.00.

Length of time bids shall remain open: 60 days after the date of the bid opening.

Notice of Award shall be given 15 days after the date of bid opening.

Schedule:

Pre-Bid meeting: 1 p.m., July 29, 2015

Last day to request interpretations of documents: August 5, 2015
(2 days prior to bid opening)

Bid opening: 01:00pm, August 7, 2015 at the Town of Crested Butte Town Hall.

Notice of Award to be issued (approximate): August 18, 2015

Deadline to execute and deliver Construction Contract, furnish bonds and evidence of insurance, submit proposed schedule of construction and estimated monthly payments, deliver Application for Exemption Certificates, and satisfy other conditions precedent: August 28, 2015 (10 days after receipt of Notice of Award)



SECTION 00200 BID NOTICE

TOWN OF CRESTED BUTTE, COLORADO

Project: 2015 Crested Butte Vehicle Storage Building

Sealed bids will be received at the reception desk at the Town of Crested Butte, Colorado, at Town Hall, 507 Maroon Avenue, Crested Butte, Colorado, until 1 p.m. on the 7th day of July, 2015, for the construction of the project referenced above.

The purpose of the bid is to establish a contract for work to be performed by December 31, 2015 after the Notice To Proceed is issued. The Town anticipates issuing the Notice of Award on or about August 17th, 2015.

Bids will be received and opened as set forth in the Instructions to Bidders. Bidders must meet certain requirements before their bids will be considered. These requirements are included in the Instructions to Bidders.

Each Bidder shall also file a form of Bid Security in the amount of five percent (5%) of the bid.

The Town intends to award the contract to the lowest responsible Bidder, but reserves the right to award to another qualified Bidder if it is in the best interest of the Town to do so. The Town reserves the right to waive any irregularities in bidding and to reject any or all bids. All bids will be evaluated and the award will be made on August 17th, 2015 at the Crested Butte Town Council meeting.

A Bidder to whom a contract is awarded will be required to furnish a certificate of specified insurance coverages and a performance bond and a payment bond in the form provided in the Bid Packet. The amount of the performance bond and the payment bond shall each be 100% of the accepted bid amount.

All Bidders are invited to attend a pre-bid conference and inspection at 1 p.m., July 29, 2015, at the Town of Crested Butte Wastewater Treatment Facility 800 Butte Avenue.

Plans and specifications are available from:

 X The Town's Consultant, as identified below, for free.

SGM Inc.
103 W. Tomichi Ave., Suite A
Gunnison, CO, 81230
Tyler Harpel
(970) 641-5355
tylerh@sgm-inc.com

This Request for Bids will be distributed as follows:

Publicly advertised.



Section 00300 Instructions to Bidders

INSTRUCTIONS TO BIDDERS

TOWN OF CRESTED BUTTE, COLORADO

PART 0 - INSURANCE REQUIREMENTS

0.01 The Successful Bidder shall carry the insurance specified in the Construction Contract and/or Contract Documents, and shall submit proof of such insurance when he delivers the executed Construction Contract to the Town of Crested Butte. The Town must be named as an additional insured on the specified liability insurance policies and certificates of insurance. Insurance certificates required for this project shall be sent or delivered to the attention Public Works Department, Attention: Rodney Due.

PART 1 - DEFINED TERMS

1.01 Terms defined in the General Conditions to the Construction Contract shall carry their defined meaning throughout this Bid Packet.

1.02 "Addenda" or "Addendum" means an addition or modification to this Bid Packet issued by the Town pursuant to paragraph 5.01 of these Instructions to Bidders.

1.03 "Bidder" means a person or entity responding to this Request for Bids.

1.04 "Bid Packet" means these following pages compiled for bidding on 2015 Crested Butte Vehicle Storage Building, Crested Butte dated July 23, 2015.

1.05 "Bid Security" means an amount of security filed with a bid in the form and amount required by paragraph 7.01 of these Instructions to Bidders.

1.06 "Construction Contract" means the Town's standard form of construction contract, which is included as Exhibit A to this Bid Packet.

1.07 "General Conditions" means the standard conditions to the Town's Construction Contract, which are included as Exhibit B to this Bid Packet.

1.08 "Successful Bidder" means the lowest, qualified, responsible Bidder to whom the Town (on the basis of the Town's evaluations as hereinafter provided) makes an award.

PART 2 - COPIES OF CONTRACT DOCUMENTS

2.01 Complete copies of the Contract Documents for use in preparing bids may be obtained from the Project Manager, as identified in Part I of this Bid Packet, the Bid Notice.

2.02 The cost, if any, to obtain plans and specifications shall be refunded upon the return of the documents in good condition, within five days after the bid opening. If not returned within five days, the above amount will be forfeited to the Town. If a contractor submits a bid, the sum paid for the plans will be returned at the bid opening. Bidders requesting mailing of the Bid Packet or plans and specifications shall pay all necessary postage.

2.03 No partial sets of Contract Documents will be issued. Complete sets of Contract Documents shall be used in preparing and submitting bids.

2.04 The Town, in making copies of Contract Documents available on the above terms, does so only for the purpose of obtaining bids on the work and does not confer a license or grant for any other use.

2.05 Bid Packets not obtained from the Town, may be incomplete or inaccurate.

PART 3 - QUALIFICATIONS OF BIDDERS

3.01 All Bidders must complete this Bid Packet as a whole, submitting a signed **Non-Collusion Affidavit of Prime Bidder** (Section 00500), a signed **Bidder's Certification** (Section 00600 of this Bid Packet, and a **Bid Bond** (Section 00700 of this Bid Packet).

3.02 In addition, all Bidders must be prepared to submit, within five (5) days of the Town's request, written evidence of their qualifications to perform the work. Bidders may be required

Section 00300 Instructions to Bidders

to submit evidence that they have a practical knowledge of the particular Work bid upon, and that they have the financial resources to complete the proposed Work.

3.03 In determining the Bidder's qualifications, the following factors will be considered: (a) work previously completed by the Bidder, (b) plant and equipment available to be used in this Work, (c) recent financial statement relative to resources, including cash and bank credits available, (d) surety company that has indicated its willingness to bond the Bidder, (e) statement of material on hand and available for this work, (f) whether the Bidder maintains a permanent place of business, and (g) whether the Bidder has appropriate technical experience. Each Bidder may be required to show that it has handled former work so that no just claims are pending against such work. No bid will be accepted from a Bidder who is engaged on any work that would impair his ability to perform or finance this Work.

3.04 Evidence of a Bidder's qualification to do business in the State of Colorado may be required.

3.05 The Bidder will be required to establish to the satisfaction of the Town the reliability and responsibility of all proposed subcontractors and suppliers pursuant to the criteria set forth in these Instructions. Prior to the award of the Construction Contract, the Town will notify the Bidder in writing if the Town has reasonable objection to any such proposed subcontractor. In this event, the Bidder may, at his option, (1) withdraw his bid, or (2) submit a substitute acceptable to the Town with an adjustment in the bid to cover any difference in cost. The Town may, at its discretion, accept the adjusted bid or may disqualify the Bidder. In the event of either withdrawal or disqualification, the bid Security shall be returned to the Bidder.

PART 4 - EXAMINATION OF CONTRACT DOCUMENTS AND SITE

4.01 Before submitting a bid, each Bidder should (a) examine the Contract Documents thoroughly; (b) visit the site or sites to familiarize himself with local conditions that

may, in any manner, affect cost, progress or performance of the Work; (c) familiarize himself with federal, state, and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; and (d) study and carefully correlate Bidder's observations with the Contract Documents.

4.02 Upon request, the Town will provide each Bidder access to the site or sites to conduct such investigations and tests as each Bidder deems necessary for submission of its bid.

4.03 Site access will be limited to normal working hours unless otherwise provided by the Project Manager.

4.04 If a meeting with Town Staff or consultant is desired, prospective Bidders must contact the Project Manager at least twenty-four (24) hours prior to the time they would like an appointment to review the project, Monday through Friday. Town Staff will comply with such requests on a time-available basis only.

4.05 A non-mandatory Pre-Bid Meeting will be held on the site at the Town of Crested Butte Waste Water Treatment Facility at 800 Butte Avenue, Crested Butte, Colorado; 1 PM, July 29th 2015.

PART 5 - INTERPRETATIONS

All questions regarding the meaning or intent of the Contract Documents are to be submitted in writing to the Project Manager. Any inquiry received Two (2) or more days prior to the date fixed for the opening of bids will be given consideration. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Addenda will be emailed or delivered to all parties recorded by the Town as having received the Contract Documents. No Addenda will be issued later than Two (2) days prior to the date of the bid receipt except Addenda, when necessary, that would postpone the date for receipt of the bids or withdraw the Request for Bids. It shall be each Bidder's responsibility to make inquiry as to the addenda that have been issued. All such addenda shall

Section 00300 Instructions to Bidders

become part of the Construction Contract, and all Bidders shall be bound by such addenda, whether or not received by the Bidder.

PART 6 - BASIS FOR EVALUATION OF BIDS

The Town does not discriminate on the grounds of race, religion, color, age, sex, disability, or national origin in consideration of an award. Disadvantaged business enterprises are afforded a full opportunity to submit bids.

In addition to the qualifications discussed in Part 3 above, the following criteria will be considered in the evaluation and award of the Bid. The Construction Contract shall be awarded to the lowest responsible Bidder meeting the bid specifications unless Town Council determines, after reviewing the Town Manager's report, that the public interest would be better served by accepting a higher bid. In determining whether the public interest would be better served by accepting a bid other than the lowest bid, the following factors shall be considered:

1. The Bidder's skill, ability, and capacity to perform the personal services or to furnish the materials, equipment or supplies required;
2. Whether the Bidder can perform the services or furnish the materials, equipment or supplies promptly, or within the time period specified, without delay or interference;
3. The Bidder's character, integrity, reputation, judgment, experience and efficiency;
4. The quality of the Bidder's performance of previous similar agreements;
5. The Bidder's previous and current compliance with statutes, ordinances and rules relating to the purchase;
6. The sufficiency of the Bidder's financial resources necessary for the performance of the purchase agreement;

7. The Bidder's ability to provide future maintenance or service;

8. The number and nature of any conditions attached to the bid;

Upon recommendation of the Town Manager, the Town Council may reject all bids when it determines that such action is in the public interest.

PART 7 - BID SECURITY

7.01 Each bid must be accompanied by security in the amount of five percent (5%) of the maximum price bid in the form of a certified or cashier's check payable to the Town, negotiable United States Government Bonds (at par value), or in the form of bid bond included with the Contract Documents.

7.02 If the Successful Bidder fails to execute and deliver the Construction Contract, furnish the required Performance Bond and Payment Bond, furnish the required evidence of insurance, or satisfy all conditions precedent to execution of the Construction Contract **within ten (10) days of the date of Notice of Award,** Owner may annul the Notice of Award and the Bid Security of that Bidder will be forfeited, not as a penalty, but as liquidated damages to compensate the Town for the cost of delay and also as an estimate of the difference between the Successful Bidder's bid and that of the next lowest acceptable bid. The Bid Security of any Bidder whom the Town believes to have a reasonable chance of receiving the award may be retained by the Town (a) until seven (7) days after the effective date of the Construction Contract or (b) until the bids expire, whichever is earlier.

PART 8 - CONTRACT TIME

The number of days within which the project is to be completed (the Contract Time) will be finally set forth in Part 1 of the Construction Contract. At this time, it is estimated the Contract Time will be foundation completion by November 1st, project completion by December 31st.

PART 9 - LIQUIDATED DAMAGES

Section 00300 Instructions to Bidders

Provisions for liquidated damages are set forth in the Construction Contract and other Contract Documents.

PART 10 - SUBSTITUTE MATERIAL AND EQUIPMENT

The Construction Contract, if awarded, will be on the basis of material and equipment described in the Technical Specifications section of this Bid Packet, without consideration of possible substitute or "or equal" items. Whenever it is indicated in the Specifications that a substitute or "or equal" item of material or equipment may be furnished or used by the Contractor if acceptable to the Project Manager, the procedure for submittal of any such application by the Contractor and consideration by the Project Manager is set forth in the General Conditions.

PART 11 – FORM OF BID

11.01 This Bid Packet contains a complete set of forms and a sample contract for the convenience and reference of Bidders. The contract is not to be detached or filled out or executed. The Bidder shall return this entire Bid Packet, having completed the forms provided. Additional copies may be obtained from the Project Manager.

11.02 All forms must be completed in ink or by typewriter.

11.03 For corporations, the Bidder's Certification must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested to by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

11.04 For partnerships, the Bidder's Certification must be executed in the partnership name and signed by a partner, whose title must appear under the signature. The official address of the partnership must be shown below the signature.

11.05 For joint ventures, the Bidder's Certification shall be signed by each participant in the joint venture or by an authorized agent of each participant, and accompanied by evidence of authority to sign.

11.06 The names of all persons signing the Bidder's Certification must also be legibly printed or typed below the signature. A bid by a person who affixes to his signature the word "president," "secretary," "agent," or other designation without disclosing his principal may be held to be the bid of the individual signing. When requested by the Town, evidence of the authority of the person signing shall be furnished.

11.07 The full name of each person or company interested in the bid shall be listed on the Bidder's Certification.

11.08 The Bidder's Certification shall contain an acknowledgment of receipt of all addenda (the numbers of which shall be filled in).

11.09 No alterations in bids, or in the printed forms - by erasures, interpolations, or otherwise - will be acceptable unless each such alteration is signed or initialed by the Bidder. If initialed, the Town may require the Bidder to identify an alteration so initialed. No alteration in any bid, or in any form submitted as part of a bid, shall be made after the bid has been submitted.

11.10 The address to which communications regarding the bid are to be directed must be shown.

11.11 All prices must be written in words and expressed in figures. The unit price items in the Bid Form are intended to cover all items of work to be done and material to be furnished to fully complete the work in accordance with the Contract Documents. The cost of appurtenant items of work, material, and equipment not listed separately, not shown on the drawings or not specified as necessary to complete the work in accordance with the Contract Documents shall be considered as included in the unit price bid.

11.12 Bids should be made on each separate

Section 00300 Instructions to Bidders

item of work shown in this Bid Packet, with reasonable relation to the probable cost of doing the work included in such item. The Town reserves the right to reject any bid in case an item or items thereof are obviously unbalanced or appear to be so unbalanced as to affect adversely an interest of the Town.

11.13 The quantities provided by the Town in this Bid Packet, the Bid Form, are approximate and are given only for use in comparing bids and to indicate approximately the total amount of the Construction Contract. The Town does not expressly or by implication represent that the actual amounts of work will correspond therewith, but does call particular attention to the uncertainty in the quantities of the Work involved that cannot be predicted in advance. The Work under certain items may be materially greater or less than those predicted in this Bid Packet, as may be necessary in the judgment of the Project Manager to complete the Work contemplated in the Construction Contract. An increase or decrease in the quantity for any item shall not be regarded as grounds for a decrease or increase in the unit prices.

PART 12- SUBMISSION OF BIDS

12.01 Each bid shall be accompanied by the Bid Security and other required documents. The complete Bid Packet must be submitted with the bid.

12.02 If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "BID ENCLOSED" on the face thereof.

12.03 Bids shall be submitted prior to the time and date set for receipt of bids in this Bid Packet, or the modified time and date as indicated by Addendum. Bids received after the time and date set for receipt of bids will be returned unopened. Bidder shall assume full responsibility for timely delivery at the location designated for receipt of bids.

12.04 Oral, telephone, or telegraph bids are invalid and will not receive consideration. No Bidder may submit more than one bid. Multiple bids under different names will not be accepted

from one firm or association. Evidence of collusion among Bidders shall be grounds for exclusion of any Bidder who is a participant in any such collusion.

12.05 All information submitted to the Town by the Bidder is a public record, and may be subject to disclosure under the Colorado Open Records Act, Colorado Revised Statute § 24-72-101, et seq. **The Bidder shall clearly identify any portion(s) of its bid that it believes constitutes trade secrets, privileged information, and/or confidential commercial, financial, geological or geophysical data which may not be subject to disclosure under the Colorado Open Records Act.**

12.06 To the extent required by C.R.S. § 8-17.5-102(1), by submitting a bid, the Bidder certifies that at the time of bid submission it does not knowingly employ or contract with an illegal alien who will perform work under its bid, and that the Bidder will participate in the E-verify program administered by the United States Department of Homeland Security and the Social Security Administration, or the employment verification program administered by the Colorado Department of Labor and Employment in order to verify the employment eligibility of all employees who are newly hired for employment to perform work under its bid.

12.07 Bids that are not completed in the form and manner required by this Bid Packet are subject to immediate rejection in the discretion of the Town.

12.08 **The submission of a bid constitutes Bidder's representation that he has complied with every requirement of this Bid Packet and that the Contract Documents, as provided in this Bid Packet, are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work. Further, the submission of a bid constitutes a Bidder's acceptance of all of the terms and conditions of the Town's form of Construction Contract, and its General Conditions, included with this Bid Packet. By submitting a bid, Bidder is agreeing to execute the Construction Contract in substantially the same form as**

Section 00300 Instructions to Bidders

presented immediately following Bidder's receipt of the Town's notice of award of this Construction Contract. A request for changes or modifications to the Town's form of Construction Contract or General Conditions may result in a disqualification of the Bidder.

PART 13 - MODIFICATION AND WITHDRAWAL OF BIDS

13.01 Bids submitted early may be modified or withdrawn by notice to the party receiving bids at the place and prior to the time designated for receipt of bids. Such notice shall be in writing and signed by the Bidder. Modifications or changes shall be so worded as not to reveal the amount of the original bid. Bids may also be modified or withdrawn in person by the Bidder or an authorized representative provided he can prove his identity and authority. Withdrawn bids may be resubmitted up to the time designated for the receipt of bids provided that they are then fully in conformance with these Instructions to Bidders and the Bid Security is in an amount sufficient for the bid as modified or resubmitted.

13.02 If within twenty-four (24) hours after bids are opened, any Bidder files a duly signed, written notice with the Town and promptly thereafter demonstrates to the reasonable satisfaction of the Town that there was a material and substantial mistake in the preparation of his bid, that Bidder may withdraw his bid and the Bid Security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work.

PART 14 - OPENING OF BIDS

Bids will be publicly opened, read aloud and tabulated by the Project Manager or other Town representative in the Town Council Chambers at the address referenced above. Bids will be acted upon by the Crested Butte Town Council within thirty (30) days from the opening of the bids. An abstract of the amounts of the bids and major alternates will be made available after the opening of the bids.

PART 15 - BIDS TO REMAIN OPEN

Bids shall remain open until the time specified on page one of these Instructions after the date of the bid opening, but the Town will, under other provisions stated in these Instructions or may in its sole discretion, release any bid and return the Bid Security prior to that date.

PART 16 - AWARD OF CONTRACT OR CONTRACTS

16.01 The Town reserves the right and discretion to reject any and all bids, to waive any and all informalities or irregularities, and to negotiate contract terms with the Successful Bidder. The Town may disregard all nonconforming, nonresponsive or conditional bids. Discrepancies between words and figures will be resolved in favor of the words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof shall be resolved in favor of the correct sum. Your attention is called to the fact that bids that are not completed in the form and manner required by this Bid Packet are subject to immediate rejection in the discretion of the Town.

16.02 In evaluating bids, the Town shall consider the qualifications of the Bidders, and whether or not the bids comply with the prescribed requirements. The Town reserves the right to reject the bid of any Bidder who does not pass any such evaluation to the Town's satisfaction. The Town may accept bids in any order or combination and may award each section of the Work to different Bidders.

16.03 The bid of any Bidder that is in arrears to the Town upon debt of contract or that is a defaulter, as surety or otherwise, upon any obligation to the Town may be rejected.

16.04 If the Construction Contract is to be awarded, it will be awarded to the lowest responsible Bidder whose evaluation by the Town indicates to the Town that the award will be in the best interests of the Town.

16.05 If the Construction Contract is to be awarded, the Town will give the Successful

Section 00300 Instructions to Bidders

Bidder a Notice of Award within the time specified on page one of these Instructions.

16.06 The Successful Bidder shall furnish the Town with a proposed schedule of construction and estimated monthly payments **within ten (10) days of the date of the Notice of Award.**

PART 17 - PERFORMANCE AND PAYMENT BONDS

The Contract Documents set forth Owner's requirements as to Performance Bonds and Payment Bonds. When the Successful Bidder delivers the executed Construction Contract to the Town, it shall be accompanied by the required Performance Bond and Payment Bond in the forms attached as **Exhibit D** to Bid Packet. Accompanying the bond forms shall be a Power of Attorney authorizing the attorney in fact to bind the surety company, and the forms shall be certified to include the date of the Bond.

PART 18 - SIGNING OF CONTRACT

When the Town gives a Notice of Award to the Successful Bidder, it will be accompanied by unsigned counterparts of the Construction Contract and all other Contract Documents. The Successful Bidder shall execute the Construction Contract and deliver it, together with evidence of insurance and the Performance Bond and Payment Bond, to the Town **within ten (10) days of the date of the Notice of Award.** Failure to do so will be adequate and just cause for the annulment or cancellation of the awards, and in such case the Bid Security shall be forfeited to the Town.

PART 19 - SALES AND USE TAXES

19.01 This Project is being undertaken directly by the Town. Therefore, pursuant to Crested Butte Municipal Code § 4-2-70, no use tax shall be due on construction materials used in this Project. These materials may be subject to sales and use taxes imposed by other taxing authorities.

19.02 Within ten (10) days from the date of the Notice of Award, the Successful Bidder shall deliver to the Town three copies of the

completed and executed Application for Exemption Certificate with the approval of the State Department of Revenue affixed. These certificates will serve as an indication to the Town that the Successful Bidder has acquired the necessary exemption for the state and other state collected sales and use taxes. The Successful Bidder shall make the same requirement, as contained above, of any subcontractors on the Project.

19.03 Town use tax will be due on construction tools and equipment used inside the Town if municipal sales or use tax was not formerly paid on the full purchase price of the equipment..

19.04 All books and records pertaining to the Project that will allow the accurate determination of any tax due must be retained and kept available for inspection by the Town for three (3) years after the completion of the Project.

19.05 All applicable taxes are to be paid by the Successful Bidder and are to be included in appropriate bid items, except that, the Successful Bidder shall not be reimbursed for any State or other sales and use taxes incurred as a result of failure to obtain an exemption certificate prior to issuance of the Notice to Proceed.



SECTION 00400 BID FORM

TOWN OF CRESTED BUTTE, COLORADO

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____, doing business as _____*, to Town of Crested Butte (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the construction of **2015 Crested Butte vehicle Storage Building** in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of the BID, each BIDDER certifies, and in the case of a joint BID, each party has been arrived at independently, without consultation, communication, or agreement as to any matter relating to the BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT by December 31, 2015. BIDDER further agrees to pay as liquidated damages, the sum of **\$200.00** for each consecutive calendar day thereafter as provided in Supplementary General Conditions.

Bidder acknowledges receipt of the following ADDENDA:

No. _____ dated _____

* Insert "a corporation", "a partnership", or "an individual", as applicable.

Base Bid: _____
(Written)

(Numeric)

Bid Additive #1 (radiant heat): _____
(Written)

(Numeric)

Bid Additive #2 (infrared heat): _____
(Written)

(Numeric)

Respectfully submitted:

Signature

Address

Title

Firm Name

Telephone

(SEAL, if Bid is by a corporation)

ATTEST: _____
Name



SECTION 00500 NONCOLLUSION FORM

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER
(COMPLETE AND SUBMIT ATTACHED TO YOUR BID)

STATE OF _____
COUNTY OF _____

_____, being first duly sworn, deposes and says that:

- (1) He is the _____ of _____, the Bidder that has submitted the attached bid (the "Bid");
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham bid;
- (4) Neither the said Bidder nor any of its officers, partner, owners agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham bid in connection with the Construction Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Construction Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, or to fix any overhead, profit or cost element of the bid price or the bid price of any other Bidder, or to secure through the collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Crested Butte or persons interested in the proposed Construction Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signed:

By: _____

Printed Name: _____

Subscribed and sworn to before me this ____ day of _____, 20____, by

_____, as _____,

(Affiant) (title)

of _____, a _____, organized

(Bidder) (corporation or partnership)

pursuant to the laws of the State of _____.

Notary Public

My Commission Expires _____



SECTION 00600 BIDDER'S CERTIFICATION FORM

BIDDER'S CERTIFICATION
(COMPLETE AND SUBMIT ATTACHED TO YOUR BID)

To: Town of Crested Butte, Colorado (hereinafter called "TOWN").

From: _____
_____ (hereinafter "BIDDER"), organized and existing under the laws of the State of _____ doing business as (a corporation), (a partnership), (an individual).

The Bidder, in compliance with the Town's Request for Bids and Instructions to Bidders, hereby proposes to perform all work in strict accordance with the Contract Documents within the time set forth therein, and at the prices stated on the included Bid Form as totaled herein (the "Bid").

By submission of this Bidder's Certification, Bidder certifies, and in the case of a joint venture each party thereto certifies as to his own organization, that the Bid has been arrived at independently, without consultation, communication, or agreement as to any matters relating to this Bid with any other Bidder or with any competitor.

The undersigned, having thoroughly inspected the existing conditions in the Project area affecting the cost of the Work and having thoroughly examined all of the Contract Documents, together with all other forms, attachments, and information required or otherwise submitted with this Bid, hereby offers to furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services including utility and transportation services and to perform and complete all work required for:

Project No. and Description: _____

It is understood by the Bidder that should the cost of the Bid exceed budgeted funds, the Town reserves the right to reject any or all bids, or portions of work bid, or to use any of the methods stated in the Instructions to Bidders to obtain the most advantageous bid price. Bidders must bid all items, additive schedules, alternatives, and supplementary unit price schedule.

The Bid is based on subcontracting certain major portions of the work to subcontractors as listed below:

<u>Item No.</u>	<u>Subcontractor</u>	<u>License Number</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Add additional names on separate sheet, if necessary.)

In addition, by submission of this Bid and this Bidder's Certification, Bidder certifies as follows:

1. Bidder understands that the Town reserves the right to reject any or all bids and to waive any informalities in the bidding.

2. The Bidder agrees that this Bid shall be good and will remain open for a period of 30 calendar days after the scheduled closing time for receiving bids. If written notice of the acceptance of this Bid is mailed or otherwise delivered to the undersigned within this period, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver a Construction Contract in the prescribed form and furnish the required surety bond or bonds within ten (10) days after the Construction Contract is presented to him for signature.

3. As required by the Instructions to Bidders, attached hereto is the **Non-Collusion Affidavit of Prime Bidder**, submitted as proof that the undersigned has not colluded with any person in respect to this Bid or any other bid or the submitting of bids for the Construction Contract for which this Bid is submitted.

4. If required by the Instructions to Bidders, attached hereto is a **Contractor's Qualification Statement**, which Bidder certifies to be completed with true and correct information.

5. The Bidder is submitting, or will submit upon request, such additional proof as the Town may require that he can qualify in accordance with these Contract Documents with this Bid.

6. To the extent required by C.R.S. § 8-17.5-102(1), by submitting a bid, the Bidder certifies that at the time of Bid submission it does not knowingly employ or contract with an illegal alien and that Bidder will participate in either the E-verify program administered by the United States Department of Homeland Security and the Social Security Administration, or the employment verification program administered by the Colorado Department of Labor and Employment in order to verify the employment eligibility of all employees who are newly hired for employment to perform work under the Construction Contract.

7. Bidder agrees to execute the Construction Contract, including its General Conditions, in the form presented in the Bid Packet.

The undersigned Bidder hereby agrees to be ready and to appear at the office of the Town's Purchasing Agent to execute the Construction Contract in conformity with his Bid and also to have ready and to furnish at that time the attached Performance Bond and Payment Bond each in an amount not less than the full amount of the attached Bid Form.

The _____, a corporation of the State of _____, is hereby offered as surety on said bond. If such surety is not approved by the Town, another and satisfactory surety company shall be furnished.

Enclosed herewith is Bid Security, as defined in the attached Instructions to Bidders, in the amount of _____, which Bid Security the undersigned Bidder agrees is to be paid to and become the property of the Town, as liquidated damages, and not as a penalty, to compensate the Town for actual costs, delay and the difference between this Bid and the next lowest acceptable bid, should this Bid be accepted and the Construction Contract awarded this Bidder and should he fail to enter into the Construction Contract in the form prescribed or fail to furnish the required bonds within ten (10) days as stipulated.

The undersigned Bidder acknowledges receipt of the following addenda:

Addendum No. _____ Date _____ Initial by Bidder _____

Addendum No. _____ Date _____ Initial by Bidder _____

Addendum No. _____ Date _____ Initial by Bidder _____

Addendum No. _____ Date _____ Initial by Bidder _____

The undersigned Bidder certifies that he and each of his subcontractors possess an adequate supply of workers qualified and equipment satisfactory to perform the Work specified in the Contract Documents; that there is no existing or impending dispute between it and any labor organization; and that it is prepared to comply fully with the provisions contained in the Contract Documents.

This Bid is submitted upon the declaration that neither I (we) nor, to the best of my (our) knowledge, none of the members of my (our) firm or company have either otherwise taken any action in restraint of free competitive bidding in connection with this Bid.

Dated at _____ this _____ day of _____, 20__.

Signature of Bidder:

If an Individual: _____
doing business as _____

If a Partnership: _____
by _____, General Partner.

If a Corporation: _____
a _____, Corporation
by _____, President.

Attest:

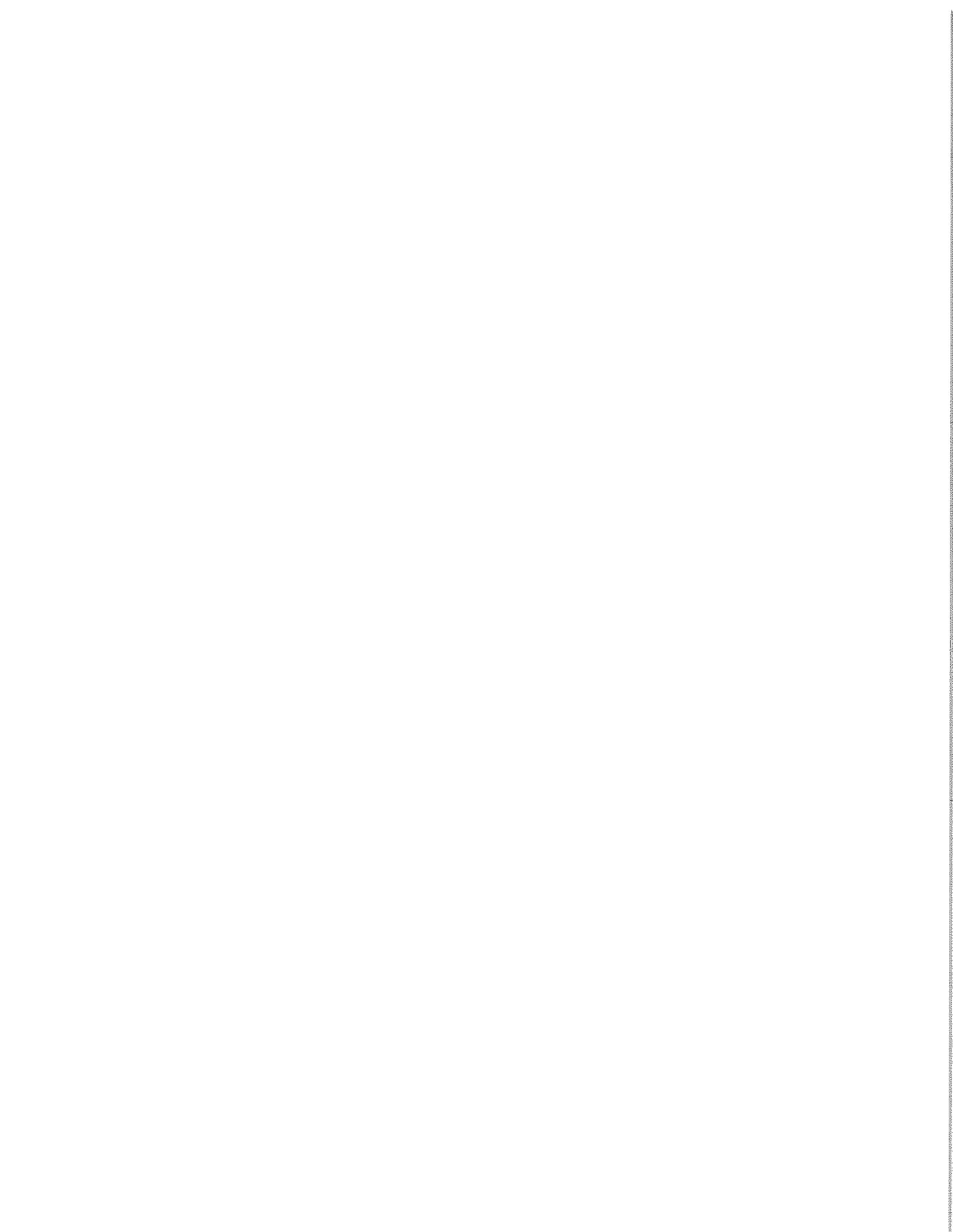
Secretary

Corporate Seal

Business Address of Bidder _____

Town, State, Zip Code _____

Telephone Number of Bidder _____



SECTION 00700 BID BOND FORM

BID BOND
(COMPLETE AND SUBMIT WITH YOUR BID)

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
_____ as Principal, and _____
as Surety, are hereby held and firmly bound unto the Town of Crested Butte, Colorado, as Owner, in the
penal sum of _____ for the payment of which, well and truly to be made,
we hereby jointly and severally bind ourselves, successors and assigns.

THE CONDITION of this obligation is such that whereas the Principal has submitted to the Town of
Crested Butte, Colorado, the accompanying bid (the "Bid"), which is hereby made a part hereof, to enter
into a contract for the construction of _____,

AND WHEREAS, the Owner, as a condition for receiving said Bid, requires the Principal to deposit with
the Owner a Bid Security equivalent to not less than five (5) percent of the amount of said Bid,

NOW, THEREFORE,

(a) If said Bid shall be rejected; or in the alternative,

(b) If said Bid shall be accepted and the Principal shall execute and deliver a contract (properly
completed in accordance with said Bid) and shall furnish a Performance Bond and Payment Bond upon
the forms prescribed by the Owner for the faithful performance of said contract; and for the payment of
all persons performing labor or furnishing materials in connection therewith; and shall in all other
respects perform the agreement created by the acceptance of said Bid; or in the alternative,

(c) If the Principal shall pay to the Town, as liquidated damages, and not as a penalty, to
compensate the Town for actual costs and delay the difference in amount between the Principal's Bid and
that of the next lowest acceptable Bidder, then this obligation shall be void, otherwise the same shall
remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any
and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its
bond shall be in no way impaired or affected by any extension of the time within which the Owner may
accept such Bids; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, this
_____ day of _____, 20____, and such of them as are corporations have caused their
corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and
year set forth above.

PRINCIPAL

SURETY

Name: _____

Address: _____

By: _____
Title: _____

Attorney in Fact

Give local address and
phone number if different
than above:

(Seal)

(Seal)

NOTE: Surety companies executing bonds must be authorized to transact business in the State of Colorado and be acceptable to the Owner.

INSTRUCTIONS

1. The full firm name and residence of each individual party to the bond must be inserted in the first paragraph.
2. If the principal is a partnership, the full name of all partners must be inserted in the first paragraph which must recite that they are partners composing the partnership (to be named), and all partners must execute the bond as individuals.
3. The state of incorporation of each corporate party to the bond must be inserted in the first paragraph and the bond must be executed under the corporate seal of said party attested by its secretary or other authorized officer.
4. Power of attorney must accompany this bond when signed by other than an officer of either the principal or surety.

SPECIFICATIONS

2015 Crested Butte Vehicle Storage Building



SECTION 01000

GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. The Contractor shall be responsible for compliance with all items specified herein. This Section is in addition to items in the General Conditions.
- B. Work to be done under this Contract consists of furnishing all labor, materials, equipment and incidental items and performing all operations necessary to complete the Work in accordance with the Drawings and Specifications.
- C. The Bidder is required to examine carefully the site of the proposed Work, the Drawings and Specifications. He shall satisfy himself as to the character, quality and quantities of work to be performed, materials to be furnished and the requirements of these Specifications. The submission of a Bid Proposal shall be evidence that the Bidder has made such an examination.

1.02 DRAWING ACCURACY AND EXISTING UTILITIES

- A. No effort has been made to identify and verify all existing facilities and utilities. However, it is believed that no utilities are in the way of construction.
- B. As such, it shall be the responsibility of the Contractor to contact the appropriate representatives of utility companies, or utility locate companies, a minimum of 48 hours prior to the commencement of Work which might affect utility installations and to secure from such representatives information as to accurate location, size and type of such installations. The Contractor shall assume all responsibility for protection, repair and relocation of all such items encountered. Should repair or replacement be required, work shall be performed according to the requirements of the respective utility company.

1.03 ABBREVIATIONS

- A. Wherever the following abbreviations are used in these Specifications or on the Drawings, they shall be construed the same as the respective expressions represented:

AASHO or	
AASHTO	American Association of State Highway Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute, Inc.
ASTM	American Society for Testing & Materials
AWWA	American Water Works Association
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment

CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard, U.S. Department of Commerce
FED. SPEC.	Federal Specification
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
OSHA	Occupational Safety and Health Act (Federal and/or State)
SSPC	Steel Structures Painting Council
UBC	Uniform Building Code
UL	Underwriters Laboratories, Inc.

1.04 STANDARD SPECIFICATION REFERENCE.

- A. Where reference is made in these Specifications to other Standard Specifications, it is the intent that the latest available revisions of the Specification referenced be used. All portions of the Standard Specification referenced shall be considered a part of these Specifications unless specifically superseded herein.

1.05 CONSTRUCTION STAKING.

- A. It shall be the responsibility of the Contractor to coordinate with the Owner to determine the layout of the building and complete a control survey at the project site.
- B. The contractor may self perform or subcontract construction layout work, provided that contractor satisfactorily proves to the Owner that their designated layout person has the proper training and experience.
- C. The Contractor shall be responsible for paying their surveyor directly.
- D. The Contractor shall be responsible for coordinating all survey efforts.

1.06 PERMITS AND EASEMENTS.

- A. The Owner will provide the Contractor with a building permit. The Contractor will be responsible for coordinating inspections and meeting permit requirements.
- B. The Contractor shall obtain an Electrical Permit from the State of Colorado. The Contractor will be responsible for coordinating inspections and meeting permit.
- C. Contractor will be fully responsible for implementing, maintaining, and meeting all requirements of all permits related to the project.
- E. The Owner shall provide permanent construction and maintenance easements, where required.
- F. The Contractor shall be responsible for securing any and all access rights he may require for construction convenience with private individuals and landowners. The Contractor shall provide the Engineer evidence of agreements, in writing, for such

access rights. All other permits required should be secured prior to commencement of Work at the Contractor's own expense.

- G. The successful Contractor will be required to obtain a local Contractor's license for construction operations. Proof of insurance shall be required.

1.07 SUBSTITUTION OF MATERIALS.

- A. At no time shall materials be substituted for those shown on the Drawings or called for in the Specifications, unless written approval is obtained from the Engineer in writing prior to construction. Any deviation from the Drawings and Specifications shall be accompanied by a written directive of the Engineer or his representative.

1.08 CONTROLLED AREA OF WORK.

- A. The Contractor shall confine all the construction work, storage of materials and all related activities to the public roadways, utility easements, or construction areas designated by the Owner. Access and egress to the work area shall be minimized to specific points.

1.09 TEMPORARY FACILITIES.

- A. The Contractor, at his expense, shall provide all necessary temporary facilities for his own convenience or to meet local, state or federal requirements, including, but not limited to, potable water, sanitary waste facilities, power, telephone, internet, etc.

1.10 CLEAN-UP.

- A. The Contractor will be responsible for cleaning the job site during and after construction. A continuing effort shall be made through the duration of the contract to keep all areas clean and free of all rubbish, removed vegetation, construction waste, employee waste, and other objectionable materials generated from the project. All materials as part of this work shall be disposed off site in an acceptable manner. Final clean-up must be approved and accepted by the Owner before the contract may be considered complete.

1.11 SUBMITTALS

- A. The Contractor shall submit a minimum of five (5) sets of submittal data, as defined in Section 01300 Submittals and in each specific specification such as 13120 Prefabricated Metal building Shop Drawings and submittal requirements. Submittals shall be required on all materials having quality or dimension requirements as well as on all mechanical equipment or as called for in the Specifications. At a minimum, the Owner will retain two (2) sets plus an additional one (1) set for the Engineer.

1.12 JOB SITE RESTRICTIONS

- A. Staging Area. There is limited space on the Owner's property available for Contractor staging or storage area. The Contractor will be responsible for working with the Owner to identify all acceptable areas on the project site.
- B. Disposal Area. Minimal spoils will be used for re-grading Owner's property. All other materials shall be disposed of off-site at approved disposal sites. Owner may provide a location for material within one mile of the project site.
- C. Working Hours. Work will normally be permitted after 7:00am until 5:00pm, Monday thru Friday. Other work hours must be approved by Engineer in writing. If approved by Owner, written notice must be provided a minimum of 48 hours prior to this work that outlines all work items that will be performed. The Contractor will be responsible for paying overtime rates (1.5 x the standard hourly rate) for Owner, Owner's Representative and Engineer for work necessitated by construction activities outside the permitted work hours.

1.13 SAFETY REQUIREMENTS

Nothing in the Contract Documents shall be construed as relieving the Contractor from protecting all property and persons or from strictly adhering to all applicable local, state and federal safety requirements. Where there is a conflict between the Contract Documents and any applicable safety requirement, the safety requirement shall take precedence.

1.14 LAWS AND ORDINANCES

The Contractor shall at all times observe and comply with all federal, state and local laws, ordinances and regulations which in any manner affect the contract or Work, and shall indemnify and save harmless the Owner and the Owner's agents against any claim arising from the violations of any such laws, ordinances and regulations, whether by the Contractor or his employees.

If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules or regulations, and without notice to the Engineer, he shall bear all costs arising therefrom.

1.15 PROTECTION OF PUBLIC UTILITIES AND OTHER ADJOINING PROPERTY

The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to other property at the site or adjacent thereto, and he shall be liable for any and all claims for such damage on account of his failure to fully provide such protection. The Contractor shall notify all public utility companies at least forty-eight (48) hours prior to commencement of any Work in the vicinity of the utilities. No Work shall commence until the utilities have been located and staked by the utility company or written consent to proceed has been given by the Engineer. If utility service must be interrupted, the Contractor shall notify the head of local administrative services (i.e., City Manager, Mayor, City Clerk), as applicable, and utility users affected by the interruption of service at least twenty-four (24) hours prior to interruption. Notice shall consist of publication in a local newspaper

and/or announcement on local radio or television stations as determined by the Engineer.

1.16 PROJECT PHOTOGRAPHS/VIDEOS

It is the Contractor's responsibility to take a sufficient number of pre-construction photographs/videos to resolve any disputes, which may arise regarding the conditions prior to and subsequent to construction. The Contractor shall provide copies of the pre-construction photographs/videos to the Engineer prior to the start of work. Any potential problems should be identified at that time.

Progress and record photographs/videos shall be provided by the Contractor as appropriate to resolve any disputes and to completely document the work performed as a supplement to the Record Drawings. In general, the photographs/videos should be sufficient to show that all work was properly completed in accordance with the plans and specifications.

1.17 DAMAGE TO CONSTRUCTION

The Contractor shall safeguard, until all work embraced by this Contract is formally accepted, all construction, both complete and incomplete, against damage and destruction, and should damage result, he will be required to reconstruct or repair it at his expense in a manner conforming to the Plans and Specifications, reconstruction shall be in a manner suitable to the Engineer.

END OF SECTION



SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

- A. This project consists of construction of a pre-manufactured steel vehicle storage building at the site of the existing Crested Butte wastewater treatment facility.

This project is considered a “design/build” project. Contractor shall provide a short project approach narrative and materials list with bid.

Some project components and details including: electrical design, sizing of heating units, window/door details and utilities are required but not designed. These elements, and others, are left to the contractor to complete.

The contractor is expected to complete the package for building permit submission, meeting all applicable building requirements. Prior to submission, a draft shall be submitted to the Owner for approval.

The project specifications are intended to provide the Contractor guidance as to the quality standards and/or requirements of the individual components or work elements. This “Summary of Work” identifies building requirements and provides specifications for some elements of the building.

This project more specifically involves the following:

1. Excavation and site preparation of subgrade.
2. Installation of concrete foundation system with overall dimensions of the slab footprint of sixty nine (69) feet wide by thirty five (35) feet deep. There will be no drain. Foundation system shall include:
 - a. A perimeter grade beam/spread footing foundation, with pads at rigid frame support locations. Either slab tie or footings designed to resist horizontal frame reaction are acceptable. Design may be based on Geotechnical Report in Appendix E. Footing depth shall be adequate to meet the Town of Crested Butte requirements for frost protection.
 - b. A five (5) foot tall (above grade) stem wall on the west side to prevent snow from crushing metal. Stem wall thickness may be reduced to a minimum of 7” to allow it to pass by rigid frames.
 - c. A 6” reinforced concrete slab on grade designed to support Town’s maintenance vehicles. Foundation wall shall be depressed at door openings and to allow slab to be poured over; slab shall be thickened to 8” at doors for a 24” width.
 - d. A one half (1/2) percent slope in the slab on grade towards the garage doors with no floor drains.

- e. Twenty four (24) inches of R-15 or greater insulation over top of six (6) inches of compacted class 4 base course.
 - f. Construction and expansion joints placed such that no section of slab is greater than 20 feet on a side
3. Erection of pre-manufactured steel building per manufacturer's instructions. Building must meet all Town of Crested Butte building codes. Building shall include:
- a. Single pitch roof sloping from east down to west, with an eave height of 16 ft at the east wall.
 - b. Five (5) overhead garage doors sized twelve (12) feet wide by fourteen (14) feet tall. Doors shall have automatic garage door openers sized per door manufacturer recommendations for size and weight of door. Each door shall have a wall mounted push button control and two remote openers provided.
 - c. Ceiling light fixtures shall be fluorescent tube lighting.
4. Connection of electric line. Contractor is responsible to contact appropriate electric, and any other potential utility, providers for service to the new building. Scheduling and cost for utilities shall be the Contractor's responsibility.
- a. Contractor is responsible to provide the service of a licensed electrical contractor for the building electrical work. Contractor shall base his bid on a minimum of a two hundred (200) amp service. Service entrance and disconnect shall be on the new building.
 - b. In the garage the Contractor shall provide a minimum of six (6) duplex GFCI certified wall outlets on twenty (20) amp circuits. Lighting, outlets and power supply design provided by Contractor per electrical code. Submit to owner prior to building permit application.
5. Final site grading, including placement and grading of at least two (2) inches of base course ten (10) feet in every direction around the building.
6. Wall and ceiling insulation values shall be at minimum R30 on ceiling and R19 on walls.
7. The base bid for the project is to include no heating of the building or gas connection. The bid form has two bid additives that the Owner may select in regards to the heating of the building.
- a. Bid Additive #1 is for gas fired in-floor, direct vent radiant heat. This additive is to fully include all work including design of system for Crested Butte, approval through Town Building department, gas service connection coordination and fees, meter, and all work and material to install the system fully functioning.
 - b. Bid Additive #2 is for gas fired infrared direct heat system, direct vent radiant heat. This additive is to fully include all work including design of system for Crested Butte with operating system set to only be on when doors are closed, approval through Town Building department, gas service connection coordination and fees, meter, and all work and material to install the system fully functioning.

1.02 CONTRACTOR'S RESPONSIBILITIES

In addition to all the requirements of the Standard General Conditions and other Contract Documents:

A. Supervision:

1. The Contractor will supervise and direct the Work. He will be solely responsible for the means and methods, techniques, and procedures of construction.
2. The Contractor will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor and the Contractor's representative at the site.
3. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor.
4. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the Work.
5. The supervisor shall not be changed except with the consent of the Engineer, unless the supervisor has proven to be unsatisfactory to the Contractor and ceases to be in his employ.

B. Subcontracting:

1. The Contractor may utilize the services of specialty Subcontractors on those parts of the Work, which under normal contracting practices are performed by specialty Subcontractors.
2. The Contractor shall not award work to Subcontractor(s) in excess of fifty (50%) percent of the Contract Price without prior written approval of the Owner.
3. The Contractor shall be fully responsible to the Owner for the acts and omissions of his Subcontractors, and or persons either directly or indirectly employed by them, as he is for the acts of persons directly employed by him.
4. The Contractor shall cause appropriate provisions to be inserted in all Subcontracts relative to the Work to bind Subcontractors to the Contractor insofar as applicable to the Work of Subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.
5. Nothing contained in this Contract shall create any contractual relations between any Subcontractor and the Owner.

C. Safety and Protection

1. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. 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 who may be affected thereby;
 - b) All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site; and
 - c) Other property at the site or adjacent thereto, including, but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.
2. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

D. Contractor's Use of Premises

1. Owner controls all lands upon which the Work is to take place. The Contractor shall not enter upon private property for any purpose without first obtaining written permission. A copy of the document giving Contractor permission to enter private property along with all terms of this agreement shall be transmitted to the Owner prior to entering property. Contractor shall be responsible for the preservation of all public and private property, trees, fences, monuments, underground structures, etc., on and adjacent to the site and shall use every precaution necessary to prevent damage or injury thereto. He shall protect carefully from disturbance or damage, all land monuments and property corners until an authorized agent has witnessed or otherwise referenced their location, and shall not remove them until directed. He shall be responsible for all damage or injury to property of any character resulting from any act, omission, neglect or misconduct in his or any Subcontractor's manner, or method or executing said Work, due to this or any Subcontractor's non-execution of said Work, or at any time due to defective work or materials, and said responsibility shall not be released until the Work shall have been completed and warranty period expired.
2. The Contractor shall be responsible for all utilities required for construction at no cost to the Owner.
3. Necessary sanitary conveniences for the use of project personnel shall be properly secluded from public observation and shall be erected and maintained by the Contractor at such points acceptable to the Owner.

1.03 OWNER COORDINATION AND NOTIFICATION

- A. The Contractor shall coordinate his efforts with the Owner so as to minimize disruption of existing service and inconvenience to adjacent property owners.

1. Set forth proposed work sequence and schedule in accordance with Section 01310 - Construction Schedules.
- B. Contractor shall notify Owner a minimum of 48 hours in advance of any efforts needing coordination and/or special inspection by Owner or their representative. Such efforts include but are not limited to:
1. Utility tie-ins.
 2. Utility relocations.
 3. Service/access interruptions.
 4. Process interruptions.
 5. Equipment testing and startup.

1.04 SEQUENCE OF WORK

- A. Construction Sequencing: Work efforts, commissioning and decommission of the Work herein described will include a critical sequence of work. Contractor shall take into account this sequence when preparing bid and the successful Bidder shall include this sequence in the construction schedule. Coordination of Work necessary to meet the construction sequence as discussed below is the responsibility of the Contractor. The Engineer and Owner shall be updated prior to start and completion of each phase.
- B. The Contractor shall develop his own sequence of Work to minimize construction time, site disturbances and interruptions of existing plant operations. Any scheduled event involving the Owner or Engineer shall be thoroughly discussed and coordinated with Engineer and Owner at least 48 hours in advance.

PART 2 PRODUCTS

2.01 OWNER FURNISHED MATERIALS

In addition to the assignment of pre-purchased equipment contracts, the following Owner items shall be incorporated in the Work of this project.

1. There are no Owner furnished materials for this project.

2.02 MAINTENANCE OF ACCESS

- A. Conduct Work to interfere as little as possible with public or private travel, whether vehicular or pedestrian including with Public Works traffic at the location of the job site.
1. Whenever it is necessary to cross, close, or obstruct roads, driveways and walks, whether public or private, provide and maintain suitable and safe bridges, detours, or other temporary expedients for accommodation of public and private travel.

2. Give owners of private drives reasonable notice (minimum 48 hours) before interfering with accesses.

PART 3 EXECUTION

3.01 FENCES

- A. Maintain all fences affected by the Work until completion of the Work.
- B. Do not relocate or dismantle fences that interfere with construction operations before obtaining written permission from the fence owner with an agreement as to the length of time the fence may be left relocated or dismantled.
- C. At the completion of Work, replace fences to their pre-construction condition or better and to their pre-construction location unless otherwise indicated on drawings or in specifications.

3.02 UNDERGROUND OBSTRUCTIONS

- A. Protect from damage any underground pipes, utilities, or structures encountered during construction.
- B. Restore any damaged underground obstructions to their original condition at no cost to the Owner unless evidence of other arrangements satisfactory to all parties is presented to the Owner in advance.
- C. Before commencing Work, obtain information concerning location, type, and extent of concealed existing utilities on the site and adjacent properties.
 1. Consult records and personnel of local utility companies, municipal utility departments, telephone companies, and cable television companies.
 2. File "Notice of Excavation" with these agencies prior to commencing Work.
- D. Underground obstructions are not believed to pass within the construction zone, however it is the responsibility of the contractor to verify this prior to construction.
 2. Contractor is responsible to restore all underground obstructions encountered.

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 SUMMARY.

- A. Requirements. The Contractor shall submit to the Engineer for approval all submittals required by the Contract Documents. Submittal shall be submitted on form 01300-A.
- B. Form 01300-A includes an area for the Contractor to check that he has verified that the material or equipment meets the Specification requirements or deviates from the Specification for the reasons listed. A line also exists for the Contractor to sign the submittal. If the areas are not checked or the submittal is unsigned, it will be returned disapproved.
- C. The Contractor shall review and approve all shop and layout Drawings, product data, samples, materials, manuals and plans required to be submitted by the Contract Documents. Approval by the Contractor dictates that he has verified all materials, field measurements with those shown on the Drawings, and similar items. Approval also indicates that the Contractor has coordinated Information contained in the submittal with work requirements of all trades and with the Contract Documents. The Contractor's submissions to the Engineer shall be timely so as to not delay the Work.
- D. The Contractor is required to submit five hard copies of each submittal or re-submittal for approval. The Engineer will return two copies to the Contractor. The Engineer may request up to an additional five copies of manuals by notifying the Contractor in writing and such copies will be at no extra cost.

1.02 SUBMITTAL CONTENT.

- A. The submittal number shall be arranged as follows:
 - 1. The first character shall be a letter identifying "D" as a shop or layout drawing, "S" as a sample, "M" as a manual or miscellaneous, or "P" as a plan or schedule.
 - 2. The next 5 digits of the submittal number shall be the Specification section number.
 - 3. The next 3 digits shall be the numbers 001 through 999 to sequentially number each separate package submitted under each specific Specification section number.
 - 4. The last character shall be a letter A through Z indicating whether the submittal is the first submission (A) or a resubmission (B through Z). The letter "B" indicates a second submission, "C" a third submission, etc. An example of a submittal number would be D-03300-008-B, which indicates a shop drawing submittal pertaining to the concrete section that is the eighth submittal under this section and is the second submission of this particular shop drawing.

- B. Submittals will be returned to the Contractor marked either "NET" which means that No Exceptions Taken, or the submission is approved, "MCN" which indicates Make Corrections Noted, and that the submittal is approved subject to incorporation of the comments shown on the submittal, "A&R" which is Amend and Resubmit, and "R" which is Rejected, or the submittal is disapproved for the reasons shown or listed and shall be resubmitted. One other notation may be shown as "N" which is Noted, for a submittal that does not require Engineer approval but will be placed in the project files.
- C. Reviewed submittals will be returned to the Contractor with the Engineer's comments, if any. The Engineer's review is for general conformance with the Contract Documents only and all Work is still subject to the detailed requirements of the Contract Documents. The Engineer's review is to help the Contractor find or discover errors and omissions. The Engineer's review does not relieve the Contractor of the obligation and responsibility to coordinate and plan the details of the Work and fulfill the intent and purpose of the Contract. The Engineer's review shall not relieve the Contractor of the responsibility for accuracy, proper fit or proper functioning and performance of the Work. The Engineer reserves the right to require written confirmation from the Contractor that the comments placed on submittals stamped "MCN" were actually or will be implemented. The Engineer will make every reasonable effort to process and return each submittal within 15 days after receipt in the Engineer's office, but with the following qualifications:
1. Large or multiple submittals may require additional time.
 2. Contractor may prioritize submittals and Engineer will review and return them in the order of highest priority.
 3. If requested by the Contractor, individual drawings from large submittals with numerous drawings may be returned as they are reviewed rather than waiting for the entire review to be completed.
 4. The need for re-submissions or delays in obtaining the Engineer's review or approval shall not entitle the Contractor to a time extension for Contract completion.
- D. The Contractor shall make all corrections and changes to submittals as required by the Engineer and resubmit until approved. The Contractor shall review submittals returned by the Engineer and shall determine if changes requested by the Engineer result in extra cost. He shall notify the Engineer in writing within 5 days of receiving a returned submittal if the Contractor believes extra costs will be incurred along with the reasons for such belief. Failure of the Contractor to notify the Engineer of the extra costs, or if the Contractor proceeds with the Work, ordering materials, products or equipment or delivery to the site, waives the Contractor claim for compensation.
- E. Only the Contractor shall make submissions to the Engineer. All data and correspondence prepared by Subcontractor and suppliers shall be submitted through the Contractor. The Contractor shall prepare submittals with sufficient information, and in such a manner, that no more than two submittals are necessary to obtain the Engineer's approval. If more than two submittals are required, the Owner reserves the right to deduct the cost of the Engineer's time to review all additional re-submittals (after re-submittal number two) from moneys due the Contractor.

- F. The Contract Drawings are diagrammatic and show the general arrangement of the complete construction Work. The Contractor shall review the Drawings and Specifications and shall include any and all Work required to provide a complete and operable facility. The Contractor shall be responsible for preparing and submitting to the Engineer for review, all general arrangement drawings showing the interrelationships between civil construction and all mechanical, electrical and instrumentation equipment to be installed. Should there be a need to deviate from the Contract Drawings and Specifications, the Contractor shall submit written details, comparisons with the contract requirements, reasons for all changes, an explanations as to why the proposed change is equal or better than the Contract requirement and any reduction or increase in cost for the change to the Engineer for approval before making such changes. All extra costs to make the changes to structures, electrical, mechanical, piping and other items associated with a change shall be borne by the Contractor. In the event of varying interpretations of the Contract Documents, the Engineer's interpretation shall govern.

1.03 REQUIRED SUBMITTALS

- A. Submittal Schedule. The Contractor shall submit to the Owner for approval a detailed schedule listing all submittals to the Owner. This schedule shall include, but is not limited to, shop drawings and related data; layout drawings; materials, equipment, and fixture lists; certificates of compliance; spare parts data; sample materials and equipment manuals; test procedure plan and test results. The schedule shall indicate the type of item, Contract requirement reference; the Contractor's scheduled dates for submitting the above items and projected procurement dates. The Contractor shall revise and resubmit schedules as necessary to the Owner for monitoring.
- B. Shop Drawings. All shop drawings from the steel building manufacturer shall be submitted for engineer review.
- C. Construction Schedule. See Section 01310 – Construction Schedule.
- D. Progress Reports. During the performance of the Work, the Contractor shall submit to the Owner a written monthly progress report on or before the fifth of each month covering the previous month. Such progress reports shall include:
1. A copy of the construction schedule outlining progress to date for the previous major items of Work.
 2. A narrative summary indicating the status of Work performed and other pertinent activities indicating the actual percentage of Work completed and an estimate of the percentage of Work to be completed in the succeeding month; problem areas and recommended solutions, and manpower hours used by trade. If the Work has fallen behind schedule, the Contractor shall state how the time is to be made up to remain on schedule. Include construction photographs.
 3. The progress report shall include a procurement and delivery schedule, listing items approved, ordered, delivered and installed, for equipment, products and materials.

4. If a progress report is not submitted, the Owner reserves the right to withhold payment until delivered.
- E. **Certificates of Compliance.** Certificates required for demonstrating proof of compliance with Specification requirements, including mill certificates, shall be provided by the Contractor. It shall be the Contractor's responsibility to review and approve all certificates before submissions are made to ensure compliance with the Contract requirements. Each certificate shall be signed by an official authorized to certify on behalf of the manufacturing company and shall contain the name and address of the Contractor, the project name and location and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material, if, the material is later found not to meet the specific requirements.
- F. **Manufacturer's Certified Reports.** Where the Contract Documents require an equipment manufacturer or his authorized representative to be present at installation and startup, such manufacturer shall submit a notarized written report with respect to his equipment certifying that 1) the equipment has been properly installed and lubricated under his supervision, 2) the equipment is in accurate alignment, 3) he was present when the equipment was placed in operation, 4) he has checked, inspected and adjusted the equipment as necessary, 5) the equipment is free from any undue stress imposed by connecting piping or anchor bolts, 6) has been operated under full load conditions and operated satisfactorily, 7) he has inspected the equipment during the operational demonstrations and system validation testing to the extent specified and 8) is fully covered under the terms of the guarantee.
- G. **Samples.** After award of the Contract, the Contractor furnish for approval. samples required by the Specifications. The Contractor shall prepay all shipping charges of samples. Materials, products or equipment for which samples are required shall not be used in the Work until approved in writing. Each sample shall have a label or tag indicating:
- Name of project building or facility, project title and address.
 - Name of Contractor and, if appropriate, name of Subcontractor.
 - Identification of material, product or equipment with Specification section.
 - Place of origin.
 - Name of producer and brand.
 - Samples of finish materials shall have additional markings that will identify them in regard to installed location.
1. Approval of a sample shall be only for the characteristics or use named in such approval and shall not be construed to change or modify any Contract requirement. Substitutions will not be permitted unless they are approved in writing.
2. Approved samples in good condition will be marked for identification and may be used in the Work. Materials, products and equipment incorporated in the Work shall match the approved samples. Other samples not destroyed or

damaged in testing or not approved, will be returned to the Contractor at his expense if so requested at time of submission.

3. Failure of any material to pass the specified tests will be sufficient cause for refusal to consider, under this Contract agreement, any further samples of the same brand or make of that material. The Owner reserves the right to disapprove any material, product or equipment which has previously has proven unsatisfactory in service.
4. Samples of various materials, products or equipment delivered on the site or in place may be taken by the Owner for testing. Samples failing to meet Contract requirements will automatically void previous approvals of the items tested. The Contractor shall replace such materials, products or equipment found to have not met Contract requirements, or there shall be proper adjustment of the Contract price as determined by the Owner.

H. Miscellaneous Submissions.

1. Accident reports shall be submitted in 3 copies as soon after the accident as possible.
2. The Contractor shall submit an organization chart of his construction team for approval not later than 14 days after the beginning of mobilization or prior to any construction activity on the site. It shall show executive, administrative, and construction supervision broken into trades and crews shall include Subcontractors and shall:
 - a) Include all personnel from ownership through project manager to foreman level and designate the extent of authority and responsibility and those who can receive field orders, sign documents, etc.
 - b) Describe personnel duties.
 - c) Provide qualifications and experience of those not included in prequalification documents.
 - d) Contractor shall update the organization chart whenever key people are changed. The Engineer may interview any of the Contractor's proposed staff prior to approval.
3. Insurance Certificates. Refer to General Conditions and Supplemental General Conditions for submittal requirements. Submit updated certificates as necessary to verify current coverage.

01300-A SUBMITTAL TRANSMITTAL FORM
(This form to be enclosed with ALL Submittals)

		Seq. #	
Submittal Description:		Submittal #	
Specification Section:	Routing	Date Sent	Date Rec'd
OWNER:	Contractor/Engineer		
PROJECT:			
CONTRACTOR:			

We are sending you: Attached
 Under separate cover via _____
 Submittals for review and comment
 Product data for information only

Remarks:

Item	Copies	Date	Section No.	Description	Review Action (1)	Reviewer Initials	Review Comments Attached

⁽¹⁾ **Note:** NET=No exceptions taken; MCN=Make corrections noted; A&R=Amend & resubmit; R=Rejected, Develop Replacement
 Attach additional sheets if necessary.

Contractor

Certify either A or B:

- A We have verified that the material or equipment contained in this submittal meets all the requirements, including coordination with all related Work, specified (no exceptions).
- B We have verified that the material or equipment contained in this submittal meets all the requirements specified, except for the attached revisions.

#	Deviation

Certified by: _____ Date: _____
 Contractor's Signature

END OF SECTION

SECTION 01310

CONSTRUCTION SCHEDULES

PART 1 GENERAL

1.01 SUMMARY

- A. Within ten (10) days after effective date of agreement or by the pre-construction conference, the Contractor shall submit a critical path project schedule covering the duration of the project, beginning with the Notice to Proceed and indicating Substantial Completion and "Contract Completion". The purpose of the Project Schedule shall be to:
1. Assure adequate planning, scheduling and reporting during the execution of the Work by the Contractor.
 2. Assure coordination of the Work of the Contractor and various Subcontractors at all tiers.
 3. Establish a critical path for the completion of the Work to assist the Contractor, Owner, and Engineer in monitoring the progress of the Work and evaluating proposed changes to the Contract Duration and the Project Schedules resulting from changes in the Work and/or potential weather delays.
 4. Assist in the coordination of construction activities so as to complete the Work within the Contract Time.
- B. The Project Schedule shall be based upon the Critical Path Method (CPM) for planning, scheduling and progress reporting of the Work.
- C. The Project Schedule shall include a graphic network prepared by the Contractor. The Contractor shall transmit all schedule submissions to the Owner or his representative as both a printed or plotted pure logic diagram and a bar chart with an accompanying computer disk of the schedule. The computer disk shall be in a file format published by Primavera Project Planner (Windows versions), Primavera Sure Trak, or Microsoft Projects or Microsoft Office programs.
- D. The Contractor shall provide a Network, which shall be a reasonable representation of how the Work is planned to be performed and shall be used to monitor the progress of the work of the Contract. All costs associated with the development and maintenance of the schedule shall be borne by the Contractor.

1.02 SCHEDULING

- A. The Contractor shall submit a preliminary Project Schedule as stated above. The Owner or his representative shall review the preliminary Project Schedule and return comments to the Contractor within ten (10) working days after receipt. The Contractor then shall have five (5) working days to review the schedule and return it to the Owner or his representative for

review. The five (5) working day review and review cycles shall continue until an acceptable schedule is received by the Owner. The owner's review of the project schedule is for compliance with this article and other contractor requirements. Acceptance by the owner of the contractor's project schedules does not relieve the contractor of any of his responsibility whatsoever for the accuracy or feasibility of the project schedule, or of the contractor's ability to meet the contract completion date, nor does such acceptance expressly or impliedly warrant, acknowledge or admit the reasonableness of the activities, logic, duration or, when included, cost loading of the contractor's project schedule. An approved schedule shall be required prior to submission of the first progress payment in accordance with the Contract Documents. The following guidelines must be met:

1. The Project Schedule shall contain a sufficient number of activities to allow effective monitoring of the progress of the work.
2. Each activity shall contain only the work of a single trade or subcontractor.
3. Each activity shall be less than fifteen (15) working days in duration. Procurement and material delivery, surveying and shop drawing approvals may exceed fifteen (15) working days in duration. Activities exceeding fifteen (15) working days in duration shall be separated into two or more individual activities of less than sixteen (16) working days by area, type of work, etc. to allow for effective monitoring of the Work.
4. Each activity shall include a description of the work, original duration, contractor or subcontractor performing the work, the equipment and manpower required to do the work, all specific area, phasing or milestone classifications and the activity's relationship to other activities (contained in the Methods Statement).
5. The Project Schedule shall begin with the Notice to Proceed and end with Contract completion activities. A critical path (zero float path) through Contract completion must be generated.
6. Normally anticipated weather conditions shall be included in the Project Schedule.
7. Anticipated utility relocation activities must be shown in the schedule as they affect the contractor's activities.
8. Failure by the Contractor to include any element of work required for performance of the Contract shall not excuse the Contractor from completing all work within the Contract Time.
9. Work times shall be included showing number of days per week, shifts per day and hours per shift.
10. The Project Schedule shall contain activities for the anticipated submittal cycle of equipment or materials that could affect timely completion of the project.
11. The schedule shall include activities for anticipated procurement and delivery of material or equipment with lead times greater than three (3) weeks.

12. The progress schedule shall include all activities for all work on the project, including subcontracted work, delivery dates for critical material, submittal and review periods, milestone requirements and no work periods. Where the project has specific phases, each phase shall be described separately for each salient feature.

1.03 METHODS STATEMENT

- A. A Methods Statement shall be included for all work items that fall on the critical path of the construction schedule. This Methods Statement shall be a detailed narrative describing each feature and all work necessary to complete the feature. The Methods Statement shall be submitted with the Construction Schedule. The following format is required.
 1. Feature: name of the feature.
 2. Responsibility: Contractor, subcontractor, supplier, utility, etc. responsible of the feature.
 3. Procedures: procedures to be used to complete the work. The procedure to be used shall include general information regarding methods such as forming, excavation, placing, heating, curing, backfill and embankment, trenching, protecting the work, etc. When separate or different procedures are to be employed by the Contractor due to seasonal or project phasing requirements, such differing procedures shall be described in the procedure statement.
 4. Production Rates: the planned quantity of work per day for each feature.
 5. Labor Force: the labor force planned to do the work.
 6. Equipment: the number, types, and capacities of equipment planned to do the work.
 7. Work Times: the planned time for the work to include:
 - a) Number of work days per week.
 - b) Number of shifts per day.
 - c) Number of hours per shift.
- B. At the Owner's request, the Contractor shall update the Methods Statement, or any part thereof, and submit it with the next monthly schedule update.

1.04 PROJECT SCHEDULE UPDATES

- A. The Project Schedule updating shall be done on a monthly basis. The revision shall indicate actual progress to date, changes resulting from change orders, and planned changes necessary to complete the Work in accordance with the Contract Documents.
- B. Should the Project Schedule update indicate that the project is more than ten (10) days behind schedule it shall be revised to indicate the means which the Contractor shall use to regain the Contract Completion Date.

- C. Updating the Project Schedule to reflect actual progress made up to the date of a schedule update shall not be considered revisions to the Project Schedule.
- D. Failure by the Contractor to update the schedule shall result in a material breach of contract and will also result in the withholding of progress payments until an acceptable update is submitted by the Contractor and accepted by the Owner.

1.05 TIME IMPACT ANALYSIS FOR CHANGE ORDERS, DELAYS & CONTRACTOR REQUESTS

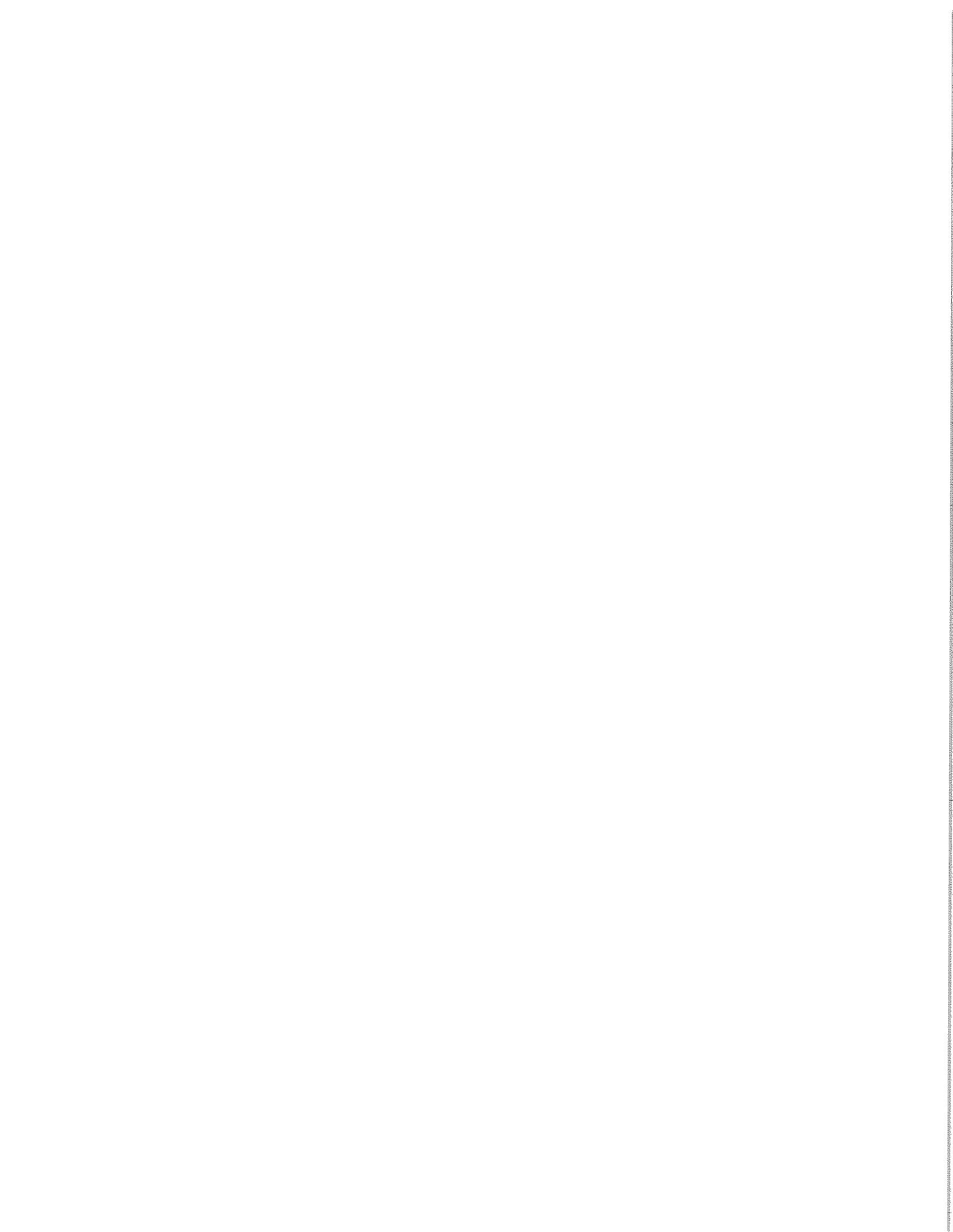
- A. When Change Orders are initiated or delays are experienced a Time Impact Analysis shall be completed to determine the effect on the Contract Completion Date. The durations of effected activities shall be altered as mutually agreed upon and the schedule recalculated. The Contract Completion Date will not be extended unless the schedule recalculation indicates a completion date beyond the current Contract Completion Date. A delay must impact the critical path of the Project Schedule as a condition to extending the Contract Completion Date.
- B. Delays caused by weather shall be reviewed at the monthly update meetings. Seasonal weather conditions shall be considered and included in the planning and scheduling of all work influenced by high or low ambient temperatures, wind, and/or precipitation to ensure completion of all work within the Contract Time. Seasonable weather conditions shall be determined by an assessment of average historical climatic conditions.
- C. Float is not for the exclusive use or benefit of either the Owner or the Contractor. Extension of the Contract Time will be granted only to the extent the equitable time adjustments to the activity or activities affected by the Change Order or delay exceeds the total (positive or zero) float of a critical activity (or path) and extends the Contract Time as set forth in the Contract.

1.06 SUBMITTALS

- A. The number of opaque reproductions required by the CONTRACTOR plus four (4) copies which will be retained or distributed by the OWNER/ENGINEER.
 - 1. Do not submit fewer than five (5) copies.
- B. Distribution
 - 1. After review, ENGINEER will distribute copies of schedules to:
 - a) Two (2) copies to OWNER.
 - b) One (1) copy to Resident Project Representative.
 - c) One (1) copy to be retained in ENGINEER's file.
 - d) One (1) copy to CONTRACTOR to be kept on file at CONTRACTOR's field office.
 - e) Remainder to CONTRACTOR for his distribution following modifications if required.

- C. Schedule recipients will report promptly to ENGINEER and CONTRACTOR, in writing, any problems anticipated by the projections shown on the schedules.

END OF SECTION



SECTION 01320

PRODUCT DELIVERY, HANDLING, STORAGE, & INSPECTION

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

- A. General and Supplementary Conditions.

1.02 PRODUCTS

- A. Products include material, equipment and systems.
- B. Comply with Specifications and referenced standards as minimum requirements.

1.03 TRANSPORTATION AND HANDLING

- A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.04 STORAGE AND PROTECTION

- A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- B. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
- C. Store loose granular materials on solid surfaces in a well drained area; prevent mixing with foreign matter.
- D. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.
- E. Contractor shall perform and document manufacturer required maintenance during storage, after installation and until commissioning of facilities. This shall include any lubricants, filters or other maintenance materials needed; any materials used shall not come from spare parts stock.

- F. Contractor shall store spare parts, whenever required by technical specifications, in accordance with the provisions of this paragraph.
1. Tag all spare parts with permanent, labeled packings by equipment designation number and identified as to part number, equipment manufacturer, and subassembly component.
 2. Properly protect spare subject to deterioration such as ferrous metal items and electrical components with lubricants or desiccants and encapsulate in hermitically sealed plastic wrapping.
 3. Store spare parts with individual weights less than 50 pounds and dimensions less than 2 feet wide, or 18 inches high, or 3 feet in length in a hinged wooden box. Paint box and identify with stenciled lettering stating name of equipment, equipment numbers, and words "spare parts".
 4. Prepare and provide a neatly typed inventory of spare parts inserted in watertight plastic sleeve and taped to underside of box cover.

1.05 INSPECTION

- A. Certificate of factory inspection and testing prior to delivery shall be supplied by the manufacturer to the Owner, who shall provide a copy to the Engineer and Contractor.
- B. Upon delivery to the site and prior to unloading; the Contractor, Engineer and Owner shall jointly inspect the materials and products. The Shipping Document or Bill of Loading shall be provided by the shipper and each item shall be verified as delivered. Items delivered shall be checked against the shop drawings to verify that all items were shipped. The manufacturer shall be informed of any discrepancies.
- C. Items shall be carefully inspected to verify that no damage occurred during shipping. If acceptable to Contractor, Engineer and Owner, the products shall be unloaded and stored by the Contractor and the Shipper released.
- D. If products are damaged but can be repaired in the field after discussion with the manufacturer, the products may be unloaded and stored for repair by the manufacturer at a location determined by the Owner and the Shipper released.
- E. If the products are damaged but can only be repaired at the factory or must be replaced, the Shipper will be directed to return the product to the manufacturer.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SUMMARY

- A. Work to be performed under this section shall include all labor, equipment, materials and miscellaneous items necessary to provide all documents, information and items as specified herein.

1.02 PROJECT RECORD DOCUMENTS.

- A. Maintain at the job site one record copy of the following (updated daily):
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Reviewed Shop Drawings.
 - 5. Change Orders.
 - 6. Other Modifications to Contract.
 - 7. Field Test Records.
- B. Do not use record documents for construction purposes. Maintain documents in clean, dry legible condition, apart from documents used for construction.
- C. Label each document "Record Document". Mark all information with contrasting color using ink. Keep each record current. Do not permanently conceal any work until required information is recorded.
- D. Record following information on Drawings:
 - 1. Northing and Easting coordinates for all building corners and all buried pipes and utilities (at ends, changes in alignment, fittings and valves). Coordinates shall be in the project coordinate system.
 - 2. Building Locations and depth of foundation elements.
 - 3. Horizontal and vertical location of underground utilities.
 - 4. Location of internal utilities and appurtenances concealed in construction.
 - 5. Structural, architectural, mechanical and electrical installations.

6. Field changes of dimension and detail.
 7. Changes by Change Order or field order.
 8. Details not on original Contract Drawings.
- E. Record following information on Specifications:
1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
 2. Changes by change order or field order.
 3. Other matters not originally specified.
- F. Maintain Shop Drawings as record documents recording changes made after review as specified for Drawings above.
- G. At completion of project, deliver record documents to Engineer with transmittal letter containing date, project title and number, contractor's name and address, title and number of each record document, and certification that each document is complete and accurate. Submittal shall be signed by Contractor or his authorized representative.

1.03 CLOSEOUT PROCEDURES.

- A. The following project closeout procedure defines the responsibilities of the Contractor, Owner and Engineer in closing the project. Closeout may be conducted by areas or portions of the work if required by the project or requested by Owner.

Detailed project closeout procedures are outlined in the General Conditions Article 14.

1.04 RE-INSPECTION FEES

- A. Should the Contractor fail to complete and/or correct all punch list items such that additional inspections are required by the Engineer, the Contractor will be billed at the Engineer's current rate for additional services. If the Contractor has any question with regard to any items on the punch list, he is to request clarification before final inspection.

1.05 FINAL PAPERWORK

- A. Prior to release of final payment, the General Contractor shall deliver the following items to the Engineer:
1. Inspection Certificates, as applicable.
 2. Equipment and material guarantees/warranties.
 3. General Contractor's two-year guarantee of materials and workmanship.

4. Materials and Equipment Manuals and Spare Parts as specified.
5. All other guarantees, warranties and submittals, as specified.
6. Receipts for extra materials delivered to the Owner.
7. Make final change-over of locks and deliver keys.
8. Final application for payment.
9. Contractor's affidavit of release of liens (Spec. Section 00691).
10. Consent of surety to final payment (Spec. Section 00692).
11. Final Project Record Documents

The purpose of final project record documents is to provide factual information regarding all aspects of work, both concealed and visible, to enable future modification of work to proceed without lengthy and expensive site measurement, investigation, and examination.

a. Transfer of Data to Drawings

- i) Carefully transfer all data to a clean set of drawings, coordinating changes as required.
- ii) Clearly indicate at each affected detail and other drawing, a full description of changes made during construction, and the actual location of items to be located.
- iii) Call attention to each entry by drawing a "cloud" around the area/s affected.
- iv) Make changes neatly, consistently, and with the proper media to assure longevity and legibility.

b. Transfer of Data to other Documents

- i) If documents other than drawings have been kept clean during progress of work, and if entries thereon have been orderly and acceptable to the Engineer, the job set of those documents other than drawings will be accepted as final record documents.
- ii) If any such document is not acceptable to the Engineer, secure a new copy of that document from the Engineer at Engineer's usual charge for reproduction and handling, and carefully transfer the changed data to the new copy for acceptance by the Engineer.

c. Changes subsequent to acceptance

- i) Contractor has no responsibility for recording changes in work subsequent to final completion, except for changes resulting from warranty work.
12. Contractor acknowledgement of Date of Substantial Completion.
13. Provide copy of all certificates and approvals required from outside agencies, i.e. State Electrical Board.
14. The above items are described in following articles or applicable sections of the Specifications.
15. Inspection Certificates. Each subcontractor shall, upon completion of the Work, secure in triplicate from any state or local governing bodies having jurisdiction in dictating that the Work is in strict accordance with the applicable codes and deliver the same to the General Contractor for transmittal to the Owner.

1.06 WARRANTY AND CORRECTION PERIOD

- A. The General Contractor warranty requirements are outlined in the General Conditions Article 6 Section 19.
- B. The correction period and procedures are outlined in the General Conditions Article 13 Section 01

1.07 MISCELLANEOUS KEYS, SWITCHES AND WRENCHES

- A. At the completion of the project, all loose keys for hose bibs, adjustment keys and wrenches for door closers and panic hardware, keys of electric switches, electrical panels, etc., shall be accounted for and turned over to the General Contractor for transmittal to the Owner.

1.08 SPARE PARTS

- A. The contractor shall provide all spare parts and products as specified in the technical specifications. Contractor shall submit an itemized list of all items furnished describing each item and citing all appropriate specification sections and paragraphs. Each item shall be packed for long term storage and marked or tagged for easy identification.
 1. Items shall be delivered to the project site to an area designated by the Owner.
 2. The contractor shall provide an inventory of delivered items and obtain a receipt from the Owner after inspection. The inventory shall be delivered with an affidavit stating these are the specified spare parts or products delivered by the manufacturer or supplier of the installed equipment or material.

1.09 FINAL SITE CLEANING.

- A. Prior to final inspection, the contractor shall clean all interior and exterior surfaces exposed to view but shall avoid disturbing natural weathering of exterior surfaces.
1. Interior Cleaning (During Construction)
 - a. Keep work areas clean so as not to hinder health, safety or convenience of personnel.
 - b. At maximum weekly intervals, dispose of waste materials, debris, and rubbish.
 - c. Remove all soils, sand, and gravel from the slab on grade to avoid muddy and/or dusty conditions inside the building.
 - d. Control dust in work areas of existing facilities.
 2. Interior Cleaning (Final Cleaning)
 - a. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight exposed interior and exterior surfaces.
 - b. Wipe all lighting fixture reflectors, lenses, lamps, and trims clean.
 - c. Wash and shine glazing and mirrors.
 - d. Polish transparent and glossy surfaces.
 - e. Clean or replace all air and oil filters all air filters used during testing operations for mechanical equipment.
 - f. Replace all burned out lamps.
 - g. Broom clean process area floors.
 3. Exterior Cleaning (During Construction)
 - a. Construction debris shall be confined in strategically located container(s) covered to prevent blowing by wind. Debris shall be removed from the work area to container daily. Debris shall be hauled from the site once a week at a minimum.
 - b. Keep weeds and other vegetation trimmed to 3 inch max height.
 - c. Remove soils, sand, and gravel deposited on paved areas and walks as required to prevent muddy or dusty conditions.
 - d. Comply with stormwater general permit requirements and monitor and employ best management practices.
 4. Exterior Cleaning (Final Cleaning)

- a. Remove trash and debris containers from the site. Reseed areas disturbed by location of debris containers.
 - b. Broom clean all paved surfaces.
 - c. Rake clean other surfaces of grounds.
- B. The contractor shall comply with all safety standards and shall not bury or burn waste on the site.

1.10 CERTIFICATE OF FINAL COMPLETION

- A. The Owner/Engineer will issue a Certificate of Final Completion in writing after successful plant startup with proper operation and control, correction of all punch list items, receipt and acceptance of the verification letter, and all items in Project Closeout section are completed.

END OF SECTION

SECTION 02201

EXCAVATION AND BACKFILL FOR STRUCTURES

PART 1 GENERAL

1.01 SUMMARY

- A. Work to be performed under this section shall include all labor, equipment, materials and miscellaneous items necessary to perform all clearing and grubbing, excavation, backfilling, compacting, testing and related work not specified elsewhere, as shown on the Drawings and required by the Specifications.
- B. All work within the rights-of-way of the Federal Government, the Colorado Division of Highways, County Governments or Municipal Governments shall be done in compliance with requirements issued by those agencies. All such requirements shall take precedence over these Specifications. It shall be the Contractor's responsibility to secure all required excavation permits and pay all costs thereof.

1.02 REFERENCE STANDARDS

- A. Colorado Department of Transportation "Standard Specifications for Road and Bridge Construction," latest edition.

1.03 SUBMITTALS

- A. The Contractor shall prepare and submit information for all imported backfill material.

1.04 FIELD CONDITIONS

- A. Existing Utilities. Locating any existing underground utilities and service lines within the construction zone is the Contractor's responsibility.
 - 1. Before commencing with work, the Contractor shall notify all public and private companies who may have utilities within the project limits. The Contractor shall coordinate with these entities all excavation performed. The Contractor shall obtain all permits required by utility owners.
 - 2. In the event of damage to any existing utility, the Contractor shall be solely responsible for the repair and payment for repair of all such damage.
 - 3. The Contractor shall make arrangements for and pay all costs for relocation of utilities requiring relocation as indicated on the Drawings. Should utility obstructions, not shown on the Drawings, be encountered and require relocation, the Contractor shall notify the Owner and the Engineer and shall make arrangements necessary for such relocation.

4. The Owner shall pay the costs for such relocation.
- B. Existing Improvements. The Contractor shall restore or protect from damage all existing improvements encountered in performance of the work. Improvements damaged as a result of this work shall be restored to original condition or better, as determined by the Engineer.
1. Adjacent property shall be protected by the Contractor from any damage. The Contractor shall be held solely liable for any damage to adjacent property and shall be responsible for all costs resulting from repair of such damage.
- C. Soil Conditions. It shall be the responsibility of the Contractor to examine soil conditions and characteristics, including the presence of groundwater that will be encountered within the limits of construction. A geotechnical report published by CTL Thompson from prior work done at the Wastewater Treatment Plant dated February 5, 2009 is available for review. If it is deemed by the Owner that additional geotechnical information is required, it is the responsibility of the Contractor to obtain this report and supply two (2) copies to the Engineer, Owner, and building manufacturer

1.05 PROTECTION OF WORK

- A. Safety. All excavations shall be protected by barricades, lights, signs, etc. as required by governing federal, state and local safety codes and regulations.
- B. Sheeting, shoring and bracing. Except where banks are cut back on a stable slope, provide and maintain sheeting, shoring and bracing systems necessary to protect adjoining grades and structures from caving, sliding, erosion or other damage, and suitable forms of protection against bodily injury, all in accordance with applicable codes and governing authorities.
1. Remove sheeting and shoring systems as excavations are backfilled in a manner to protect the construction or other structures, utilities or property. Do not remove any sheeting after backfilling.
 2. Sheeting and shoring systems shall be structurally designed and sufficiently braced to provide necessary restraining of retained backfill. Prior to installation of such systems, methods of installation and materials proposed shall be discussed with and approved by Engineer. All systems shall be in strict compliance with local, state and federal safety regulations. Contractor is solely liable for non-compliance.
- C. Site Drainage. Excavation to be protected from surface water drainage at all times.

1.06 BLASTING

- A. Blasting is NOT anticipated for this project. No blasting shall be permitted without written consent of the Engineer. Blasting shall be done only after Engineer receives permission from the appropriate governmental authority(ies). Blasting

shall be performed only by properly licensed, experienced individuals and in a manner such that no damage to any property or persons will occur due to either the blast or debris.

- B. Contractor shall provide proof of insurance as required by these Specifications, the governing authority or as required by Engineer prior to any blasting. All damage as the result of blasting shall be repaired, at the Contractor's expense, to the satisfaction of the Engineer. All earth or rock loosened by blasting shall be removed from excavations prior to proposed construction.

PART 2 PRODUCTS

- A. All materials for construction fills and backfills shall meet specified requirements for gradation and other factors defining suitability for the intended use. All classes of suitable material shall be free from perishable matter, debris, frozen material and stones and/or cemented pieces larger than permitted by the specified gradation. Classification of materials shall be as follows:

2.01 MATERIALS FOR STRUCTURE BACKFILL

- A. Structure backfill shall be composed of materials designated as Class 1, Class 2, Class 3 or Class 4.
 - 1. Class 1 Backfill (CDOT Section 703.08 - Class 1). Class 1 backfill shall be composed of materials from excavations, borrow areas, or other sources. This material shall conform to the following requirements when tested with laboratory sieves:

Sieve Designation	% by Weight Passing
2 inch	100
No. 4	30-70
No. 50	10-50
No. 200	5-20

In addition, this material shall have a liquid limit not exceeding 35 and a plasticity index of not over 6 when determined in conformity with AASHTO T89 and T90.

- 2. Class 2 Structure Backfill (CDOT Section 703.08 - Class 2). Class 2 structure backfill shall be composed of suitable materials developed from excavation, borrow areas or other sources. If the material contains rock fragments which, in the opinion of the Engineer, will be injurious to the structure, the material will not be used for backfilling. In addition, no rock larger than 4" shall be placed within the structure backfill zones shown in CDOT M-Standards M-206-1 and M-206-2.
 - 3. Class 3 Backfill (CDOT Section 703.03 - Class 6). Class 3 backfill shall consist of crushed stone, crushed slag, crushed gravel, or natural gravel conforming to the following requirements when tested with laboratory sieves.

Sieve Designation	% by Weight Passing
3/4 inch	100
No. 4	30-65
No. 8	25-55
No. 200	5-12

In addition, this material shall have a liquid limit not exceeding 30 and a plasticity index of not over 6 when determined in conformity with AASHTO T89 and T 90.

4. Class 4 Backfill (CDOT Section 703.03 - Class 2). Class 4 backfill shall be composed of suitable materials developed from excavation, borrow areas, or other sources. If the material contains rock fragments that in the opinion of the Engineer will be injurious to the structure, the native material will not be used for backfilling and the Contractor will be required to furnish Class 1 backfill material at a unit price mutually agreed upon between Contractor and Owner.

2.02 TOPSOIL

- A. Topsoil shall consist of selectively excavated, loose, friable loam reasonably free of admixtures of sub-soil, refuse, stumps, roots, rocks, brush, weeds or other material which would be detrimental to the proper development of vegetative growth.

PART 3 METHODS AND PROCEDURES

3.01 SITE PREPARATION

- A. Clearing. Remove all vegetation, stumps, roots, organic matter, debris and other miscellaneous structures and materials from work site. Dispose of off-site.
- B. Topsoil Removal. Strip existing topsoil from all areas to be distributed by construction. Topsoil to be stockpiled separately from excavated materials.
- C. Pavement Removal. See Section 02101 - Removal of Structures and Obstructions.
- D. Preservation of Trees. Refer to plans for designation of all trees, shrubs, plants and other vegetation within the project site to remain. Do not remove trees outside of excavated or filled areas, unless their removal is authorized by the Engineer. Protect trees left standing from permanent damage by construction operations.

3.02 CONSTRUCTION REQUIREMENTS

- A. The excavation and embankments required shall be finished to smooth and uniform surfaces. Materials shall not be wasted without permission of the

Engineer. The Engineer reserves the right to change grade lines, cut slopes or fill lines during the progress of the work.

3.03 STRUCTURE EXCAVATION

- A. Material outside of the limits of excavation will not be disturbed. Prior to beginning excavation operations in any area, all necessary clearing and grubbing in that area shall have been performed in accordance with these Specifications. The Contractor shall not excavate beyond the dimensions and elevations established.
- B. Structure excavation shall include all earthwork required for the construction of structures to the lines and grades called for on the Drawings.
- C. If any areas are inadvertently over-excavated, fill such over-excavation with Class 1 or Class 3 backfill.

- 1. Tolerances. In those areas upon which a sub base or base course material is required, or upon which a structure is to be constructed directly, deviation of not more than 1 inch shall be permitted when tested with a 16-foot straight edge. Deviation from grade shall not exceed 1 inch at any point.

In those areas where no additional construction, other than topsoil addition, will occur, the finished surface shall be smooth and shall not deviate from grade by more than 0.5 foot at any point.

- 2. Groundwater Control. Contractor to maintain facilities on site to remove all groundwater from excavated area and keep water below the bottom of the excavation to a point such that a firm base for equipment or concrete installation exists. Facilities shall be maintained until all backfilling is in place at least 24 inches above anticipated water levels before dewatering equipment removal. All water removal shall be in accordance with the CDPHE dewatering permit and is also subject to approval by the Engineer.

Removal of water by bucketing, sump or trench diversions, intermittent pumping, or sump or submersible pumps is considered incidental to excavation work. Inclusion of a bid item for dewatering indicates dewatering by continuous pumping, well-point type systems is expected. If such dewatering system is required, in the opinion of the Engineer, this work to be paid for as indicated in the bid schedule, or if not included in the bid schedule to be considered extra work paid for at a price negotiated between Contractor and Owner prior to the start of dewatering.

- 3. Stockpile Excavated Material. Excavated material to be stockpiled so as not to endanger the work or public safety. Maintain existing vehicular and pedestrian traffic with minimum disruption. Maintain emergency access and access to existing monitoring wells, fire hydrants and water valves.
 - a) Maintain natural drainage courses and street gutters.
 - b) Backfill material to be segregated from stock piled topsoil and

unusable backfill materials.

4. Over-excavation. Whenever the site is over-excavated more than 0.1' to eliminate point bearing by rocks or stones beneath proposed structures or when grade tolerances are exceeded, the Contractor is to re-establish grade using Class 1 backfill. Compaction shall be to 95% maximum density. All work to re-establish grade shall be at the Contractor's expense.
5. Unstable Materials. Materials which are not capable of supporting superimposed loadings are defined as unstable materials. Should unstable materials be encountered during excavation, immediately notify Engineer. If, in the opinion of the Engineer, unstable soil excavation is required and the Contractor could not have reasonably been expected to discover the existence of such materials during his site investigation, then a contract price for Unstable Soil Excavation shall be negotiated between Owner & Contractor. No payment shall be made for materials excavated prior to notification of the Engineer and negotiation of payment for extra work.
6. Rock Excavation. Rock excavation shall be defined as removal of boulders in excess of three (3) cubic yards or solid or fractured rock, which requires techniques, such as blasting or jacking for removal, other than those which are being employed by the Contractor or are normally used in excavation, such as use of backhoes, trenchers, draglines, etc. Should unanticipated rock conditions be encountered, immediately notify the Engineer. If in the opinion of the Engineer, rock excavation is required and the Contractor had in fact made a diligent and determined effort to remove the material using normal excavation procedures as stated above and the Contractor could not have reasonably been expected to determine the existence of such material during his site investigation, then a contract price for Rock Excavation shall be negotiated between the Contractor and the Owner. No payment shall be made for excavation performed prior to determination of a negotiated price.

Rock shall be removed to a 4" depth below grade. In addition, all rock loosened during jacking, blasting, etc. shall be removed from the site. For payment purposes, maximum depth to be paid for shall be 12" below required grade. All over-excavation shall be replaced as specified in Subsection 3.03, D.

Inclusion of a bid item for Rock Excavation indicates such excavation is anticipated. Contractor to notify Engineer prior to any rock excavation; no payment shall be made for excavation prior to notification.

7. Disposal of Excess Excavation. Contractor to dispose of excess excavation off-site. Disposal in any case shall be the sole responsibility of the Contractor.

3.04 BACKFILLING

- A. Do not begin backfilling until construction below grade has been approved, underground utility systems have been inspected, tested and approved and trash and debris have been cleaned from the excavation.
- B. Place approved excavated material in successive uniform maximum loose layers in the same order as removed; not exceeding 8 inches for the full width of the cross-section in all accessible areas. Place material in successive uniform loose layers not exceeding 4 inches in areas not accessible or permitted for the use of self propelled rollers or vibrators. Do not place fill on muddy or frozen subgrade, or until subgrade is approved by the Engineer.
- C. Construct fills to the lines and grades indicated on the Drawings within tolerances stated in Section 3.03, A above. Use suitable materials removed from the excavation prior to obtaining material from borrow areas. Where otherwise suitable material is too wet, aerate, dry or blend to provide the moisture content specified for compaction.

3.05 COMPACTION

- A. During placing and/or compacting operations with earth or earth-and-rock mixtures, the moisture content of materials in the layers being compacted shall be near optimum and uniform throughout the layer. In general, maintain the moisture content of the material being placed and compacted within 2% of optimum condition as determined as ASTM Standard D698.
 - 1. **Compaction Equipment.** Perform all compaction with approved equipment well suited to location and material being compacted. Use heavy vibratory rollers or sheepsfoot rollers where heavy equipment is authorized by Engineer. Do not operate heavy equipment closer to structures than a horizontal distance equal to height of backfill above bottom of structure foundation. Compact remaining area with hand tampers suitable for material being compacted. Place and compact backfill around pipes with care to avoid damage.

Compact fill materials to following densities at optimum moisture content based on ASTM D698 or AASHTO T99 as shown on the Drawings or as follows:

- a) Structure fill under or within 5' horizontally of all concrete structures: 95%.
- b) Backfill beneath or within 5' horizontally of existing or proposed pavements, roadways, sidewalks, curbs, utility lines or other improvements: 95%
- c) Backfill within public or designated rights-of-way: 90% or as shown on the Drawings.
- d) Backfill within undeveloped, green or undesignated area: 85%.
- e) Backfill for any fill for overcut grading in areas of lot/home construction: 95%.

2. Jetting. Jetting and water inundation are generally not permitted methods of compaction. The Engineer may allow jetting under certain field conditions. Techniques including depth of lifts, amount of water to be used, penetration of hose jet, etc., shall be at the direction of the Engineer. No jetting will be allowed on materials with a 200-minus gradation of greater than 15%. Contractor shall pay cost of all water used, soil classification testing and compaction testing and any retesting or recompaction required. No jetting shall be done prior to written approval and direction of the Engineer.
3. Maintenance. Contractor to maintain all backfill in satisfactory condition during the extent of the contract and warranty period. All surface deterioration determined to be the responsibility of the Contractor and all settlement shall be repaired at once by the Contractor upon notice by the Owner. All costs for repair and all liability as a result of surface deterioration or settlement shall be the responsibility of the Contractor.

3.06 SURFACE RESTORATION

- A. All existing surface improvements and site conditions disturbed or damaged during construction are to be restored to a condition equal to pre-construction condition. All restoration costs are considered incidental to excavation and backfill.
 1. Improvements. Replace, repair or reconstruct all improvements as required. Work will not be accepted until restoration is accepted by Engineer and all affected property owners.
 2. Final Grading. The Contractor is to re-establish existing final grade or finish to final grades as modified and shown on the Drawings. The Contractor is to backfill to proper subgrade elevation with backfill material to allow placement of surface improvements or materials.

3.07 INSPECTION AND TESTING

- A. Inspection and testing to be performed at the direction of the Engineer. Contractor to cooperate fully with all persons engaged in testing. Contractor to excavate as required to allow testing; Contractor to backfill all test excavations in accordance with these Specifications.

3.08 DENSITY TESTING AND CONTROL

- A. Reference Standards. Density/moisture relationships to be developed for all soil types encountered according to ASTM D698 or AASHTO T99.
- B. Field Testing. Testing for density during compaction operations to be done in accordance with ASTM D2922 using nuclear density methods.
- C. Frequency of Testing. Frequency of testing to be done at the direction of the Engineer.

- D. Retesting. In the event of failure to meet compaction criteria, Contractor shall re-excavate and re-backfill at direction of Engineer. All retesting to be paid for by Contractor and to be performed by soils testing firm approved by the Engineer.

3.09 PAYMENT FOR TESTING

- A. Owner responsible for all costs of initial testing of backfill. Contractor to pay all costs of any retesting required.

END OF SECTION



SECTION 02570
SHALLOW UTILITIES

PART 1 GENERAL

1.01 SUMMARY

- A. Work under this section shall include furnishing all materials, labor and tools necessary to perform all installation, cleaning and testing of all electrical, telephone, gas and TV cable utilities and appurtenances specified herein and shown on the Drawings.

1.02 PROTECTION OF WORK

- A. All materials shall be carefully handled, stored and protected in such a manner as to prevent damage to materials. At no time shall such materials be dropped or dumped into trench.
- B. Precaution shall be taken to prevent foreign matter from entering the pipe and fittings prior to and during installation. Place no debris, tools, clothing or other materials in the pipe during installation.

1.03 COORDINATION OF WORK

- A. Contractor to coordinate all work to be performed by utility company.

PART 2 PRODUCTS

- A. This item covers the types of materials that will be allowed for the construction and installation of utility lines. All materials used shall be new, of the best quality available and conform to applicable standards as indicated herein.

2.01 DUCTILE IRON PIPE AND FITTINGS

- A. Ductile Iron Pipe and Fittings are not permitted.

2.02 MATERIALS TYPICALLY SUPPLIED AND INSTALLED BY UTILITY COMPANY

- A. Gas line.
- B. Electrical cable, transformers and secondary junction boxes.
- C. Telephone cable.
- D. TV cable.

2.03 MATERIALS TYPICALLY SUPPLIED BY CONTRACTOR

- A. PVC conduit - Schedule 40.

PART 3 EXECUTION

3.01 GENERAL

- A. All work shall be done in strict accordance with utility company requirements and with these technical specifications. Where conflicts occur, the utility company requirements shall govern.

END OF SECTION

SECTION 02700

FINISHED GRADING AND RESTORATION

PART 1 GENERAL

1.01 SUMMARY

- A. This Work shall consist of finish grading, restoration of grounds and cleanup. This shall be a continuous process from project start-up to final acceptance of the Work by the Engineer.

PART 2 PRODUCTS

2.01 GENERAL CLEANUP

- A. Cleanup shall include the regrading, resurfacing, rebuilding and replacing of all surfaces on which construction took place, and rebuilding or replacing any areas disturbed by the construction. The streets or roads where disturbed shall be resurfaced by the Contractor, including both gravel and oil roads, and shall be replaced in as good or better condition than that at the start of construction. The Engineer shall be the sole judge as to whether streets, roads or property have been restored to a condition as good or better than at the start of construction.
- B. The Contractor shall, at all times, keep property on which Work is in progress free from accumulation of waste material or rubbish caused by employees or caused by the Work, and he shall carry on a constant program to maintain Work area, structure sites, right-of-ways and the surface of streets and roads in a condition satisfactory to the appropriate authority, grantor of the right-of-way, and the Engineer.
- C. Preliminary cleanup shall commence as soon as the construction site is occupied by the Contractor (including his employees, supplies, materials or equipment) and shall be a continuous process, if necessary, in order that the site of the Work shall have an appearance and/or utility equal to or better than the start of the Work.
- D. Upon completion of the Work, the Contractor shall remove all remaining rubbish, tools, equipment, scaffolds and surplus materials from the job and leave the Work area clean and free of debris

PART 3 EXECUTION

3.01 GENERAL

- A. All driveways, retaining walls, concrete flatwork, drainage ditches, trees, shrubs, and other miscellaneous items shall be returned to as good as or better than original conditions, if they are damaged by Work.

3.02 LANDSCAPING

- A. Place two (2) inches of base of base course ten (10) feet in every direction around the building.

END OF SECTION

SECTION 03300

CAST – IN – PLACE CONCRETE

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes. Work to be completed under this section shall include all labor, equipment, plant and materials necessary to furnish and install all poured-in-place concrete, together with all miscellaneous and appurtenant items, as shown on the Construction Drawings and as specified herein
- B. The Engineer reserves the right to request concrete materials testing be done at any time during the construction process. Concrete materials testing will be paid for by the Owner and conducted on an as needed basis.

1.02 REFERENCES

- A. Except as modified or supplemented herein, all Work shall conform to the following standards, latest edition. Refer to standards for detailed requirements.
 - 1. ACI 318 - Building Code Requirement for Reinforced Concrete.
 - 2. ACI 301 - Specifications for Structural Concrete for Buildings.
 - 3. ACI 350 - Code Requirements for Environmental Engineering Concrete Structures.
 - 4. ACI 347 - Recommended Practice for Concrete Formwork.
 - 5. ACI 305 - Recommended Practice for Hot Weather Concreting.
 - 6. ACI 306 - Recommended Practice for Cold Weather Concreting.
 - 7. Publication SP-2, ACI Manual for Concrete Inspection.
 - 8. ASTM A 615 - Standard Specifications for Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
 - 9. ASTM A 185 - Specifications for Welded Steel Fabric for Concrete Reinforcement.
 - 10. ASTM C 618 - Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for use as a Mineral Admixture in Portland Cement Concrete.

1.03 SUBMITTALS

The following shall be submitted to and approved by the Engineer prior to beginning any concrete work.

- A. Lab Design Mix. Prior to the start of Work, Contractor to submit a statement of the proportions for the concrete mixture. Statement to include:
 - 1. Location & identification of aggregate source.
 - 2. Batch quantities for one (1) cubic yard of concrete, including:
 - a. Weight of fine aggregate in a saturated surface dry condition.

- b. Weight of coarse aggregate in a saturated surface dry condition.
 - c. Weight or number of 94 pound bags of cement
 - d. Weight or gallons of water.
 - e. Amount and description (including manufacturer, specific product name, and number) of all admixtures.
 3. Test results on trial batch concrete made from the proposed mix design, including:
 - a. Cement factor in bags per cubic yard based on yield tests.
 - b. Water-cement ratio.
 - c. Percent of entrained air.
 - d. Consistency in inches of slump.
 - e. At least three 28-day compressive strength tests.
 4. Brand, type and place of manufacture of cement.
 5. Aggregate test results for grading, deleterious substances and physical properties using test procedures developed by ACI. Aggregate shall be free of substances that are deleteriously reactive with the alkali's in the cement in an amount sufficient to cause excessive expansion of the concrete. Acceptable aggregate shall be based on satisfactory evidence furnished by the Contractor that the aggregate is free from such materials. This evidence shall include service records of concrete of comparable properties under similar conditions of exposure and certified records of tests by a testing laboratory that meets the requirements of ASTM C 1077. Tests shall be made in accordance with ASTM C 1260. Prior to approval of mixture design, the Contractor shall submit written certification that the aggregate does not have a history of D-Cracking and that the aggregate is approved by a state Department of Transportation specifically addressing susceptibility to D-Cracking. If the aggregate is not approved by a state agency, the aggregates may be approved provided the aggregate is tested in accordance with ASTM C 666 and receives a durability factor of 95 percent or greater.
- B. Materials scaling. . "Scales shall be accurate within the allowable tolerances as prescribed by State law. The scales shall be sealed by the Measurement Standards Section of the Colorado Department of Agriculture at least once each year, each time the scales are relocated, and as often as the Engineer may deem necessary."
- C. Reinforcing Steel. Product data sheet and statement of manufacturer's compliance with applicable standards.
- D. Construction Joint Location. Where not indicated on the construction plans the contractor shall provide a plan indicating the proposed location of all construction joints in slabs and walls for all fluid containing tanks. The contractor shall refer to "Section 3.03 – Construction, control, and Expansion Joints" for a detailed description of joint placement and construction within structures. Construction Joint submittals are not required for structures other than fluid containing tanks.

1.04 RECORD OF THE WORK

- A. Contractor to keep a record of time, date and location of each concrete pour and submit these records to the Engineer.

1.05 NOTICE OF INTENTION TO POUR

- A. Contractor shall notify the Engineer at least 48 hours before an intended cast-in-place concrete pour. No structural cast-in-place concrete shall be poured until all reinforcing, forms and foundation soils have been inspected by the Engineer.

1.06 PROTECTION OF THE WORK

- A. Contractor to be responsible for protection of all Work prior to acceptance. In place concrete shall not be subjected to loadings or stress prematurely.

1.07 STORAGE OF MATERIALS

- A. Cement and aggregate shall be stored in such a manner as to prevent deterioration or intrusion of foreign matter. Any material which has deteriorated or which has been damaged shall not be used for concrete.
- B. All reinforcing steel shall be stored in a dry location and protected from excessive accumulation of rust or scale.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Cement. All cement shall be Portland Cement Type II or V conforming to "Standard Specifications for Portland Cement" (ASTM C 150) or Type MS or HS conforming to "Standard Performance Specification for Hydraulic Cement" (ASTM C 1157). The same brand cement for all exposed cast-in-place concrete shall be used. Flyash conforming to ASTM C618 may be substituted for a portion of the cement; type and amount to be approved at time of mix design submittal.
- B. Stone Aggregate. Fine and course aggregate shall conform to "Specifications for Concrete Aggregates" (ASTM C33-61T). Fine aggregates shall be clean, hard, natural and free from all foreign matter. Course aggregate shall be sound, crushed rock or gravel, free from adherent coating, organic water or injurious amounts of flat or friable pieces.
- C. Water. Water used in mixing shall be potable, cleaned and free from deleterious amounts of oil, acids, alkalis and organic material. Water used in mixing concrete shall conform to ASTM C1602
- D. Admixtures. "Protex" as manufactured by Protex Industries, Inc. and conforming to Specifications of Air-Entraining Admixtures for Concrete (ASTM C260) is an approved air-entraining admixture. Other admixtures for retarding or accelerating concrete may be used in strict accordance with manufacturer's recommendations

and ASTM Specifications upon approval of the Engineer.

- E. Form Material. For unexposed concrete surfaces, forms may be undressed lumber free from excessive knots. For exposed surfaces, use wood or metal forms as required to give finish as specified.
- F. Reinforcing Steel. Reinforcing steel shall be deformed bars conforming to "Standard Specifications for Deformed and Plain Billet Steel Bars for Concrete Reinforcement" (ASTM A615) and shall be Grade 60.
- G. Waterstop. Waterstop shall be SikaSwell S-2 as manufactured by Sika Corporation or approved equal. Waterstop shall be bentonite-free. To be installed per manufacturer recommendations.
- H. Epoxy Sealer for Construction Joints. Epoxy sealer shall be SikaGuard 62 as manufactured by Sika Corporation or approved equal. To be installed be manufacturers instructions.

PART 3 EXECUTION

3.01 CONCRETE MIX

- A. Proportions. Concrete is to be proportioned according to laboratory designed mixes using the type of aggregate, maximum water/cement (W/C) ratio, maximum aggregate size, minimum of twenty-eight (28) day ultimate compressive strength, and entrained air as follows:

<u>Mix No.</u>	<u>Location</u>	<u>W/C Ratio</u>	<u>Aggregate (Size No.)</u>	<u>Strength (psi)</u>	<u>Entrained Air (%)</u>
1	Walls, Footings, Structural Slabs	0.53	67	4000	NR
2	Basins	0.45	67	4000	5 to 7
3	Interior Flatwork	0.53	67	3500	NR

- B. Air Entrainment. An air-entraining agent shall be added to all stone concrete so as to entrain 5%-7% by volume. Air-entraining agents shall be in strict accordance with the recommendations of the manufacturer and the testing laboratory for the design mix to assure strength requirements are being fully met or exceeded.
- C. Mixing of Materials. The concrete shall be mixed until there is a uniform distribution of the materials and shall be discharged completely before the mixer is recharged. For job-mixed concrete, the mixer shall be rotated at the speed recommended by the manufacturer.

For stone concrete, mixing shall continue for at least one minute after all materials are in the mixer. Ready mixed concrete shall be mixed and delivered in accordance with "Standard Specifications for Ready Mixed Concrete" (ASTM C94-69).

Sufficient time shall be allowed for proper mixing of the concrete to provide uniformity throughout the batch. Long delays in concrete placement shall be avoided and any concrete that has not been placed within 90 minutes after water has been added to the mix shall be rejected. The 90 minute time limit may be extended to 120 minutes if no water is added after 90 minutes and the concrete temperature prior to placement is less than 90 F. Over wet mixes shall be rejected and shall not be corrected by the addition of either aggregate or cement to the mixer. Mix not less than ten minutes in transit mix trucks after addition of the mixing water.

- D. Consistency. Slumps shall be minimum, consistent with placing requirements. Slump test shall be made in accordance with "Slump Test for Consistency of Portland Cement Concrete" (ASTM C143-58). Unless written approval is obtained from the Engineer, the maximum slump shall be four (4") inches. To facilitate concrete placement, water reducing admixtures may be used if approved by the engineer. Water shall not be added at the construction site to increase concrete slump.

3.02 CONCRETE FORMS

- A. Forms shall conform to the shape, lines, grades and dimensions of the concrete as detailed on the Construction Drawings. All forms for exposed finished surfaces shall be built with the material needed to produce the form, texture and design specified in Concrete Finishes of this section.
- B. Design of Forms. Forms shall be sufficiently tight to prevent leakage of mortar and shall be properly braced or tied together so as to maintain the desired position. The formwork shall be designed for the loads outlined in Part 3, Section 102 of "Recommended Practice for Concrete Form Work" (ACI 347). The forms shall be oiled for ease of removal of forms after setting of concrete.
- C. Form Ties and Incidentals. All form ties shall be bolts and rods (adjustable for tightening) arranged so that no metal is within 3/4" of surface after removal of forms. No ties through exposed concrete will be allowed. Ties for water/wastewater structures (tanks, basins, channels etc.) shall be furnished with water resistant washers and cones, as manufactured by SYMONS, or approved equal. Ordinary wire ties will be allowed on building foundations with the specific approval of the Engineer. Set forms for all required anchors, bolt inserts, slots, sleeves, supports, etc., furnished under portions of this Specification and installed under this section.
- D. Removal of Forms. Forms shall not be disturbed until concrete has hardened sufficiently to permit their removal with safety. The removal of the forms shall be carried out in such a manner as to insure the safety of the structure. Unless otherwise permitted by the Engineer, forms shall not be removed until 24 hours after pouring.

3.03 CONSTRUCTION, CONTROL, AND EXPANSION JOINTS

Expansion, construction, and control joints shall be constructed in accordance with the

construction drawings, and the specifications found in this section.

- A. Expansion joints - Unless otherwise indicated on the construction drawings, install one-half inch ($\frac{1}{2}$ ") thick asphalt impregnated fiberboard expansion joint filler (ASTM D1751) wherever concrete slabs abut buildings or footings or as shown on the plan details. All expansion joint filler shall extend full depth of the slab.
- B. Control joints – control joints shall be placed in all non-fluid containing slabs-on-grade, and shall not be spaced more than 20 feet on center, or forming an area greater than 400 sq.ft. Control joints shall be sawn or trowel cut into concrete slab a maximum of 12 hours after the concrete has been placed.
- C. Construction joints – construction joints shall be constructed in accordance with the construction drawings and placed at a maximum spacing provided in the following table:

Non-fluid containing structures - Walls	50 ft on-center maximum parallel spacing
Non-fluid containing structures - Slabs	Construction joints shall be spaced in accordance to the latest ACI & IBC codes. Re: section 3.03, part B – Control joints.

3.04 CONCRETE PLACEMENT

- A. Preparation for Placing. Before placing concrete, all equipment for mixing and transporting concrete shall be cleaned and all debris and ice shall be removed from places to be occupied by concrete. Forms shall be properly treated and all reinforcement cleaned of ice and other coatings. Water shall be removed from place of deposit before concrete is placed.
- B. Conveying. Concrete shall be conveyed from the mixer to the place of final deposit by methods, which will prevent the separation or loss of the materials. Equipment for chuting, pumping, or pneumatically conveying concrete shall be of such size and design as to ensure a practically continuous flow of concrete at the delivery and without separation of the materials.
- C. Other Trades. Install by way of example, anchor bolts, reinforcing steel, pipe and conduit openings and sleeves, bearing plates, and knockouts as provided by other trades and as required by other trades. Provide minimum 7 days notice to Engineer, Owner, or other trades prior to requiring materials or detailing information. Installation to meet location, dimension and alignment requirements of other trades.

- D. Depositing. Concrete shall be deposited as nearly as practicable in its final position to avoid segregation due to re-handling or flowing. The concreting shall be carried on at such a rate that the concrete is at all times plastic and flows readily into the space between the bars. No concrete that has been partially hardened or been contaminated by foreign matter shall be deposited on the Work, nor shall re-tempered concrete be used. When concreting is once started, it shall be carried on as a continuous operation until the placing of the panel or section is completed. Place concrete in approximately horizontal layers avoiding displacement of reinforcement above fresh concrete and formation of seams and planes of weakness in sections. When construction joints are necessary, they shall be located as specified in this section under Construction Joints. For bonding fresh concrete, roughen and clean exposed surface and brush with neat cement grout. Place new concrete before grout takes initial set.
- E. Compaction. Place concrete in layers not over 24" deep; compact each layer by mechanical internal vibrating equipment supplemented by hand spading, rodding, tamping, as directed. Vibrators shall not be used to transport concrete inside forms. Limit vibration duration to the time necessary to produce satisfactory consolidation without causing objectionable segregation. Do not insert vibrator into lower courses that have begun to set.
- F. Weather Conditions. Unless adequate protection is provided and the Engineer's approval is obtained, concrete shall not be placed during rain, sleet, or snow. When the mean temperature falls below 40°F for 3 successive days, concreting shall conform to "Recommended Practice for Cold Weather Conditions: (ACI 306 R-78). Concrete placed in hot weather shall meet the standards of "Recommended Practice for Hot Weather Concreting (ACI 305R-77). Concrete is not to be placed under water. A suitable means shall be provided for lowering the water level below surfaces upon which concrete is to be placed. This may require excavating approximately 12 inches below the bottom of the concrete surface and refilling with gravel and compacting. The groundwater shall not be allowed to rise to the bottom of the concrete until 24 hours after the concrete has been completed. Water shall not be allowed to fall upon or run across the concrete during this period.
- G. Protection and Curing. Concrete protection and curing shall be in conformance with ACI 308-71. Immediately after placing or finishing, concrete surfaces not covered by forms shall be protected from loss of surface moisture. All concrete shall be kept in a moist condition for at least five (5) days after placement. Curing compounds may be used upon approval of the Engineer.

3.05 SLABS ON GRADE

- A. All slabs on grade shall be poured directly on prepared gravel sub grade where shown on the Construction Drawings. Construction joints shall be placed such that no section of slab is greater than 20 feet on a side. Finishes, Expansion & Control Joints & Protection shall be as specified under other sections of this section.
- B. Minimum six (6) inches of class 4 base course shall be installed under the entire slab unless otherwise directed by the Engineer. Minimum twenty four inches (24") R-15 or greater insulation shall be installed between crush rock and slab on grade.

3.06 CONCRETE FINISHES

- A. Patching. Patching shall be done on all concrete surfaces immediately after stripping forms; all exposed surfaces shall have fins and other projections carefully removed, offsets leveled, and voids saturated with water and patched to a true and even surface with a wood float. Patch all holes left by the removal of the form ties or bolts. Patching material shall be a stiff mixture of sand and cement, the color of which matches the concrete being patched. Any major area of faulty or honey-combed concrete shall be completely removed and patched at the direction of the Engineer. For water/wastewater structures (tanks, basins, etc.), surface voids larger than 1/4" diameter shall be patched.
- B. Floor slabs. All concrete slabs shall be screened to levels or grades indicated and float finished monolithically completely free from humps or pits. Slabs shall not show surface deviation in excess of one-quarter inch (1/4") when tested with a 10 ft. straightedge. Before the finish has set, the surface cement film shall be removed with a fine brush in order to have a fine-grained, smooth but sanded texture.
- C. Chamfer. All exposed exterior corners shall receive 3/4" chamfer.

3.07 REINFORCING

- A. Placing Reinforcement. Reinforcing steel, at the time concrete is placed, shall be free from scale, rust or other coatings that will destroy or reduce bond. Reinforcement shall be accurately placed as shown on the Construction Drawings and shall be adequately secured in position by concrete or metal chairs and spacers.
- B. Reinforcing shall be furnished in the full lengths indicated on the Construction Drawings unless otherwise authorized by the Engineer. Splicing of bars, except where shown on the Construction Drawings or specified, shall not be permitted without written approval by the Engineer. Reinforcement placed in any member shall be inspected before any concrete is placed and the Engineer shall be notified 24 hours in advance before any concrete placement.
- C. The placing, fastening, splicing and supporting of reinforcing steel and welded wire fabric shall be in accordance with the Construction Drawings and the latest edition of the CRSI "Recommended Practice for Placing Reinforcing Bars" and in accordance with ACI 318-05. Bars shall be placed around all corners to splice steel in adjacent walls, footers and slabs (such detailing may not be shown on Construction Drawings).
- D. Concrete Protection & Reinforcement. Where not otherwise indicated on the Construction Drawings, the minimum thickness of concrete over the reinforcement shall be as follows:
 - 1. Concrete deposited against earth: 3"
 - 2. Slabs and walls not exposed to weather or earth: 1"
 - 3. All other concrete placed in forms:

For bars larger than #5: 2"
For bars #5 or smaller: 1½"

4. Sanitary Structures: 2"

- E. Bearing Plates, anchor bolts, etc. Place all bearing plates, anchor bolts, reinforcing rods and other structural items furnished by other trades. Contractor to provide 7-day notice to all such trades prior to affected pour. Installation to be within tolerances required by other trades.

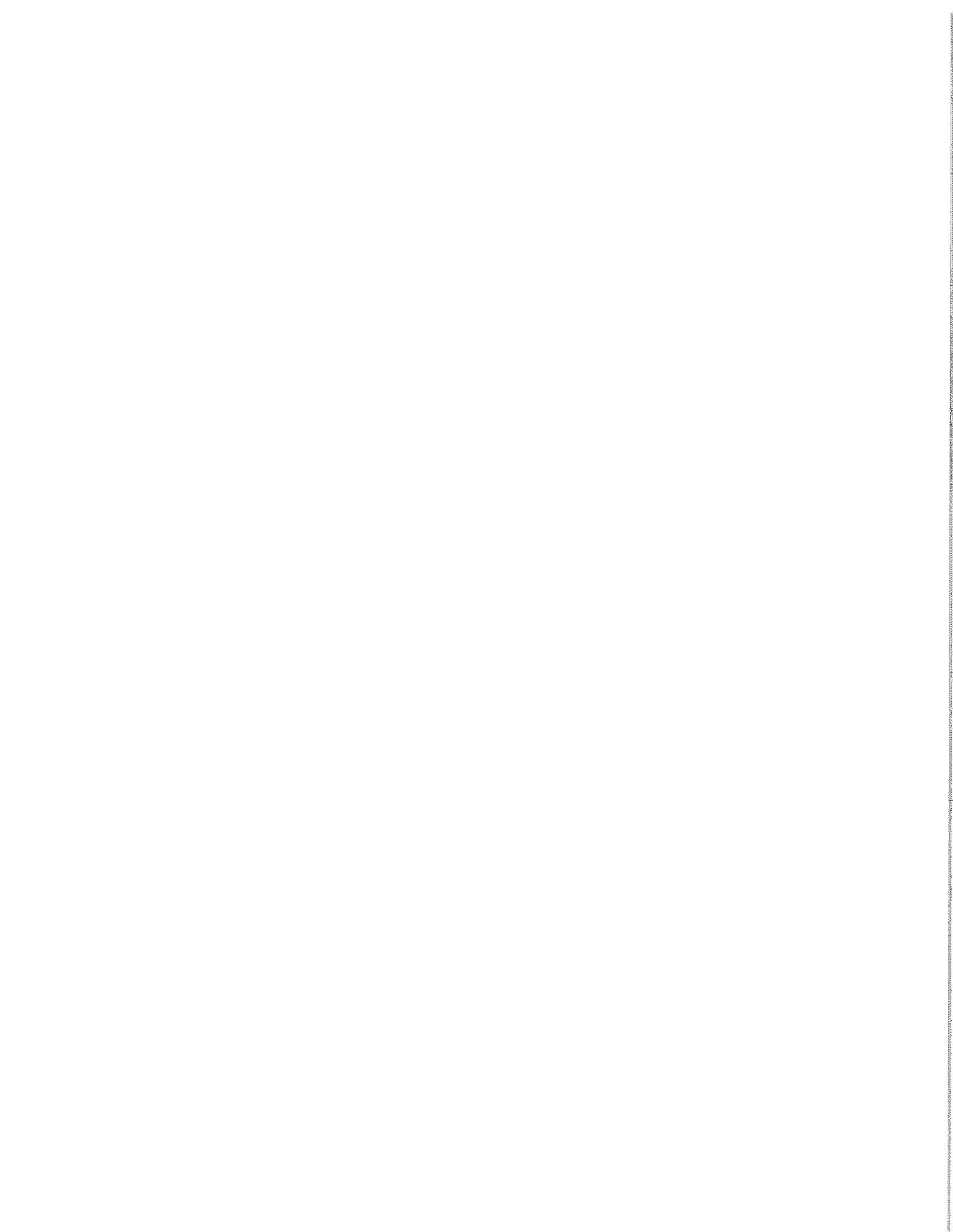
3.08 FIELD QUALITY CONTROL

- A. Concrete Tests. 6" x 12" (or 4" x 8") cylinders shall be taken at the point of placing in the forms, shall be job cured and tested in accordance with ASTM Standards by the Engineer. For each strength of concrete used, one set of four (4) cylinders for each day's pour, but not less than one (1) set of cylinders for each 50 cubic yards poured shall be taken. Two (2) cylinders at twenty-eight (28) days shall be tested to determine strength. One cylinder at seven (7) days, and one cylinder at fifty six (56) days may be tested as indicators at the direction of the Engineer. In addition, when in the opinion of the Engineer there is a possibility of the surrounding air temperature falling below 40° F; additional specimens to be cured under job conditions may be required.
- B. Enforcement of Strength Requirements. Should the strengths shown by the test specimens fall below the specified values, the Engineer shall have the right to require changes in proportions to apply on the remainder of the Work.
- C. If concrete fails to meet the strength requirements of this specification, the Engineer may order the Contractor to have a testing laboratory, acceptable to the Engineer, take and test core samples of questionable concrete. The Engineer may order all low-strength concrete removed and replaced if core strengths are below specified strengths. All costs connected with concrete coring and removal and replacement of low-strength concrete shall be borne by the Contractor.
1. Contractor shall repair all core holes at his expense.

3.09 CONCRETE REPAIR

- A. Concrete Repair. In the event there are leaks as determined by the testing program as specified on the drawings, Contractor shall make repairs as necessary to satisfy the requirements of the program. Acceptable products are Sika, type and installation methods as recommended by the manufacturer for the specific application. Product and method of installation as selected by the Contractor shall be submitted to the Engineer for approval.

END OF SECTION



SECTION 08110
STEEL DOORS AND FRAMES

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Standard hollow metal doors and frames.

1.02 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Include elevations, door edge details, frame profiles, metal thicknesses, preparations for hardware, and other details.
- C. Samples for Initial Selection: For units with factory-applied color finishes.
- D. Samples for Verification: For each type of exposed finish required.
- E. Schedule: Prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings.

1.03 QUALITY ASSURANCE

- A. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at as close to neutral pressure as possible according to UBC Standard 7-2 or UL 10B.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. 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:
 - 1. Metal Building Supplier's standard door.

2.02 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, CS, Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, CS, Type B.

- C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.
- D. Frame Anchors: ASTM A 591/A 591M, Commercial Steel (CS), 40Z (12G) coating designation; mill phosphatized.
 - 1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.
- E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.
- F. Grout: ASTM C 476, except with a maximum slump of 4 inches (102 mm), as measured according to ASTM C 143/C 143M.
- G. Mineral-Fiber Insulation: ASTM C 665, Type I.
- H. Glazing: Division 8 Section "Glazing."
- I. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat.

2.03 STANDARD HOLLOW METAL DOORS

- A. General: Comply with ANSI/SDI A250.8.
 - 1. Design: Flush panel.
 - 2. Core Construction: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core.
 - a. Fire Door Core: As required to provide fire-protection ratings indicated.
 - b. Thermal-Rated (Insulated) Doors: R-value of not less than 12.3 deg F x h x sq. ft. /Btu when tested according to ASTM C 1363.
 - 3. Vertical Edges for Single-Acting Doors: Manufacturer's standard.
 - 4. Top and Bottom Edges: Closed with flush or inverted 0.042-inch- (1.0-mm-) thick, end closures or channels of same material as face sheets.
 - 5. Tolerances: SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames."
- B. Exterior Doors: Face sheets fabricated from metallic-coated steel sheet. Comply with ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:
 - 1. Level 4 and Physical Performance Level A (Maximum Duty), Model 2 (Seamless).
- C. Interior Doors: Face sheets fabricated from cold-rolled steel sheet unless metallic-coated sheet is indicated. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:
 - 1. Level 4 and Physical Performance Level A (Maximum Duty), Model 2 (Seamless).
- D. Hardware Reinforcement: ANSI/SDI A250.6.

2.04 STANDARD HOLLOW METAL FRAMES

- A. General: Comply with ANSI/SDI A250.8.
- B. Exterior Frames: Fabricated from metallic-coated steel sheet.
 - 1. Fabricate frames with mitered or coped corners.
 - 2. Fabricate frames as full profile welded unless otherwise indicated.
 - 3. Frames for Level 4 Steel Doors: 0.067-inch- (1.7-mm-) thick steel sheet.
- C. Interior Frames: Fabricated from cold-rolled steel sheet unless metallic-coated sheet is indicated.
 - 1. Fabricate frames with mitered or coped corners.
 - 2. Fabricate frames as full profile welded unless otherwise indicated.
 - 3. Frames for Level 4 Steel Doors: 0.067-inch- (1.7-mm-) thick steel sheet.
 - 4. Frames for Wood Doors: 0.067-inch- (1.7-mm-) thick steel sheet.
 - 5. Frames for Borrowed Lights: Same as adjacent door frame.
- D. Hardware Reinforcement: ANSI/SDI A250.6.

2.05 FRAME ANCHORS

- A. Jamb Anchors
 - 1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch (1.0 mm) thick, with corrugated or perforated straps not less than 2 inches (50 mm) wide by 10 inches (250 mm) long; or wire anchors not less than 0.177 inch (4.5 mm) thick.
 - 2. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch (1.0 mm) thick.
 - 3. Postinstalled Expansion Type for In-Place Concrete or Masonry: Minimum 3/8-inch- (9.5-mm-) diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.
- B. Floor Anchors: Formed from same material as frames, not less than 0.042 inch (1.0 mm) thick, and as follows:
 - 1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.06 STOPS AND MOLDINGS

- A. Moldings for Glazed Lites in Doors: Minimum 0.032 inch (0.8 mm) thick, same material as door face sheet.
- B. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated.
- C. Loose Stops for Glazed Lites in Frames: Minimum 0.032 inch (0.8 mm) thick, same material as frames.
- D. Removable stops shall be located on the non-secure side of the door opening.

2.07 LOUVERS

- A. Provide louvers for interior doors, where indicated, that comply with SDI 111C, with blades or baffles formed of 0.020-inch- (0.5-mm-) thick, cold-rolled steel sheet set into 0.032-inch- (0.8-mm-) thick steel frame.

2.08 ACCESSORIES

- A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.
- B. Grout Guards: Formed from same material as frames, not less than 0.016 inch (0.4 mm) thick.

2.09 FABRICATION

- A. Tolerances: Fabricate hollow metal work to tolerances indicated in SDI 117.
- B. Hollow Metal Doors:
 - 1. Exterior Doors: Provide weep-hole openings in bottom of exterior doors. Seal joints in top edges of doors against water penetration.
 - 2. Glazed Lites: Factory cut openings in doors.
 - 3. Astragals: Provide overlapping astragal on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated.
- C. Hollow Metal Frames: Where frames are fabricated in sections, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 1. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
 - 2. Sidelight and Transom Bar Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.
 - 3. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
 - 4. Grout Guards: Weld guards to frame at back of hardware mortises in frames to be grouted.
 - 5. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
 - 6. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Masonry Type: Locate anchors not more than 18 inches (457 mm) from top and bottom of frame. Space anchors not more than 32 inches (813 mm) o.c. and as follows:
 - 1) Two anchors per jamb up to 60 inches (1524 mm) high.
 - 2) Three anchors per jamb from 60 to 90 inches (1524 to 2286 mm) high.
 - 3) Four anchors per jamb from 90 to 120 inches (2286 to 3048 mm) high.
 - 4) Four anchors per jamb plus 1 additional anchor per jamb for each 24 inches (610 mm) or fraction thereof above 120 inches (3048 mm) high.

- b. Stud-Wall Type: Locate anchors not more than 18 inches (457 mm) from top and bottom of frame. Space anchors not more than 32 inches (813 mm) o.c. and as follows
 - 1) Three anchors per jamb up to 60 inches (1524 mm) high.
 - 2) Four anchors per jamb from 60 to 90 inches (1524 to 2286 mm) high.
 - 3) Five anchors per jamb from 90 to 96 inches (2286 to 2438 mm) high.
 - 4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches (610 mm) or fraction thereof above 96 inches (2438 mm) high.
 - 5) Two anchors per head for frames more than 42 inches (1066 mm) wide and mounted in metal-stud partitions
 - c. Postinstalled Expansion Type: Locate anchors not more than 6 inches (152 mm) from top and bottom of frame. Space anchors not more than 26 inches (660 mm) o.c.
 - 7. Door Silencers: Except on weather-stripped doors, drill stops to receive door silencers.
 - a. Single-Door Frames: Three door silencers.
 - b. Double-Door Frames: Two door silencers.
- D. Hardware Preparation: Factory prepare hollow metal work to receive templated mortised hardware according to the Door Hardware Schedule and templates furnished as specified in Division 8 Section "Door Hardware."
 - 1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
 - 2. Reinforce doors and frames to receive nontemplated, mortised and surface-mounted door hardware.
 - 3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
 - 4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 16 electrical Sections.
- E. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.
 - 1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow metal work.
 - 2. Multiple Glazed Lites: Provide fixed and removable stops and moldings so that each glazed lite is capable of being removed independently.
 - 3. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
 - 4. Provide loose stops and moldings on inside of hollow metal work.
 - 5. Coordinate rabbet width between fixed and removable stops with type of glazing and type of installation indicated.

2.10 STEEL FINISHES

- A. Prime Finish: Apply manufacturer's standard primer immediately after cleaning and pretreating.
 - 1. Shop Primer: ANSI/SDI A250.10.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Hollow Metal Frames: Comply with ANSI/SDI A250.11.
1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. At fire-protection-rated openings, install frames according to NFPA 80.
 - b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - c. Install frames with removable glazing stops located on secure side of opening.
 - d. Install door silencers in frames before grouting.
 - e. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - f. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
 - g. Field apply bituminous coating to backs of frames that are filled with grout containing antifreezing agents.
 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.
 - a. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.
- B. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.
1. Non-Fire-Rated Standard Steel Doors:
 - a. Jambs and Head: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
 - b. Between Edges of Pairs of Doors: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
 - c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch (9.5 mm).
 - d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch (19 mm).
 2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
- C. Glazing: Comply with installation requirements in Division 8 Section "Glazing" and with hollow metal manufacturer's written instructions.
1. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches (230 mm) o.c. and not more than 2 inches (50 mm) o.c. from each corner.

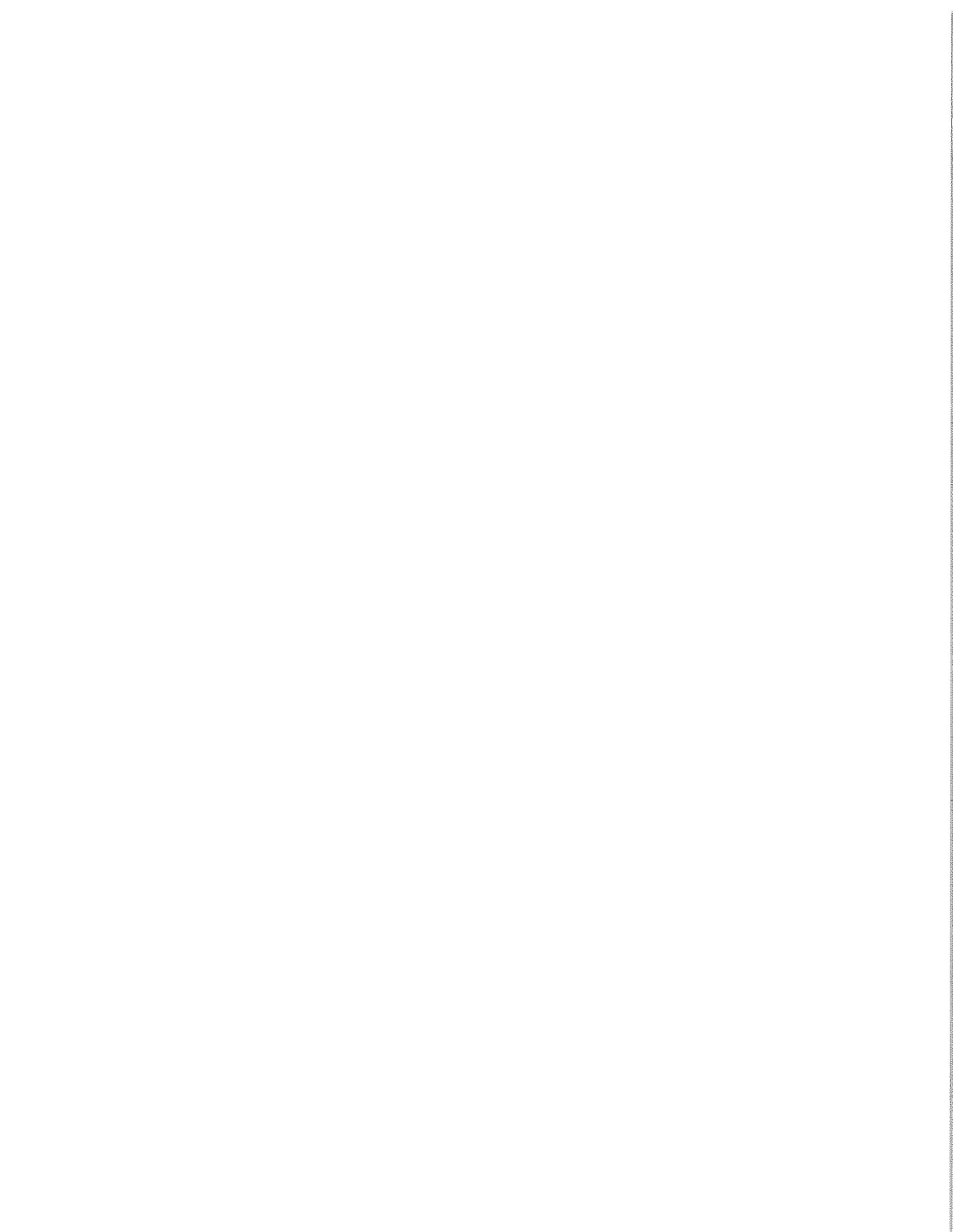
3.02 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and

replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.

- B. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
- C. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION



SECTION 08361

SECTIONAL OVERHEAD DOORS

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes electrically operated sectional doors.

1.02 PERFORMANCE REQUIREMENTS

- A. General Performance: Sectional doors shall meet performance requirements specified without failure due to defective manufacture, fabrication, installation, or other defects in construction and without requiring temporary installation of reinforcing components.
- B. Structural Performance: Exterior sectional doors shall withstand the effects of gravity loads, and the following loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
 - 1. Wind Loads: As indicated on Drawings.
- C. Air Infiltration: Maximum rate not more than indicated when tested according to ASTM E 283.
 - 1. Air Infiltration: Maximum rate of 0.08 cfm/sq. ft. at 15 and 25 mph (24.1 and 40.2 km/h).

1.03 SUBMITTALS

- A. Product Data: For each type and size of sectional door and accessory.
- 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.
- C. Samples: For each exposed product and for each color and texture specified.
- D. Maintenance data.
- E. Warranties: Sample of special warranties.

1.04 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. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application

- C. Standard for Sectional Doors: Fabricate sectional doors to comply with DASMA 102 unless otherwise indicated.

1.05 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of sectional doors that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.
- B. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 PRODUCTS

2.01 STEEL DOOR SECTIONS

- A. Exterior Section Faces and Frames: Fabricate from manufacturer's standard zinc-coated (galvanized), cold-rolled, steel sheet.
 - 1. Roll horizontal meeting edges to a continuous, interlocking, keyed, rabbeted, shiplap, or tongue-in-groove weathertight seal, with a reinforcing flange return.
 - 2. For insulated doors, provide sections with continuous thermal-break construction, separating the exterior and interior faces of door.
- B. Section Ends and Intermediate Stiles: Enclose open ends of sections with channel end stiles formed from galvanized-steel sheet welded to door section. Provide intermediate stiles formed from galvanized-steel sheet, cut to door section profile, and welded in place. Space stiles not more than 48 inches (1219 mm) apart.
- C. Reinforce bottom section with a continuous channel or angle conforming to bottom-section profile and allowing installation of astragal.
- D. Reinforce sections with continuous horizontal and diagonal reinforcement, as required to stiffen door and for wind loading. Provide galvanized-steel bars, struts, trusses, or strip steel, formed to depth and bolted or welded in place. Ensure that reinforcement does not obstruct vision lites.
- E. Provide reinforcement for hardware attachment.
- F. Thermal Insulation: Insulate interior of steel sections with door manufacturer's standard CFC-free insulation, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84. Enclose insulation completely within steel sections that incorporate the following interior facing material, with no exposed insulation:

2.02 TRACKS, SUPPORTS, AND ACCESSORIES

- A. Tracks: Manufacturer's standard, galvanized-steel track system of configuration indicated, sized for door size and weight, designed for lift type indicated and clearances

shown on Drawings. Provide complete track assembly including brackets, bracing, and reinforcement for rigid support of ball-bearing roller guides for required door type and size. Slot vertical sections of track spaced 2 inches (51 mm) apart for door-drop safety device. Slope tracks at proper angle from vertical or design tracks to ensure tight closure at jambs when door unit is closed.

- B. Track Reinforcement and Supports: Galvanized-steel track reinforcement and support members. Secure, reinforce, and support tracks as required for door size and weight to provide strength and rigidity without sag, sway, and vibration during opening and closing of doors.
- C. Weatherseals: Replaceable, adjustable, continuous, compressible weather-stripping gaskets of flexible vinyl, rubber, or neoprene fitted to bottom and top of sectional door unless otherwise indicated.
- D. Windows: Manufacturer's standard window units of type and size indicated and in arrangement shown. Provide removable stops of same material as door-section frames.

2.03 HARDWARE

- A. General: Provide heavy-duty, corrosion-resistant hardware, with hot-dip galvanized, stainless-steel, or other corrosion-resistant fasteners, to suit door type.
- B. Hinges: Heavy-duty, galvanized-steel hinges at each end stile and at each intermediate stile, according to manufacturer's written recommendations for door size. Attach hinges to door sections through stiles and rails.
- C. Rollers: Heavy-duty rollers with steel ball-bearings in case-hardened steel races, mounted with varying projections to suit slope of track. Provide 3-inch- (76-mm-) diameter roller tires for 3-inch- (76-mm-) wide track and 2-inch- (51-mm-) diameter roller tires for 2-inch- (51-mm-) wide track.

2.04 LOCKING DEVICES

- A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on single-jamb side, operable from inside only.
- B. Locking Device Assembly: Fabricate with cylinder lock, spring-loaded deadbolt, operating handle, cam plate, and adjustable locking bars to engage through slots in tracks.
 - 1. Lock Cylinders: Provide cylinders indicated in Schedule standard with manufacturer and keyed to building keying system.
 - 2. Keys: Three for each cylinder.
- C. Chain Lock Keeper: Suitable for padlock.
- D. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

2.05 COUNTERBALANCE MECHANISM

- A. Torsion Spring: Counterbalance mechanism consisting of adjustable-tension torsion springs mounted on torsion shaft made of steel tube or solid steel. Provide springs designed for number of operation cycles indicated.
- B. Cable Drums and Shaft for Doors: Cast-aluminum or gray-iron casting cable drums mounted on torsion shaft and grooved to receive door-lifting cables as door is raised. Mount counterbalance mechanism with manufacturer's standard ball-bearing brackets at each end of torsion shaft.
- C. Cables: Galvanized-steel lifting cables.
- D. Cable Safety Device: Include, on each side-edge of door, a device designed to automatically stop door if either lifting cable breaks.
- E. Bracket: Provide anchor support bracket as required to connect stationary end of spring to the wall and to level the shaft and prevent sag.
- F. Provide a spring bumper at each horizontal track to cushion door at end of opening operation.

2.06 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 Type: Unit of type indicated, consisting of electric motor, gears, pulleys, belts, sprockets, chains, and controls needed to operate door and meet required usage classification.
- D. Electric Motors: Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements unless otherwise indicated.
 - 1. Electrical Characteristics:
 - a. Phase: Single phase.
 - b. Volts: 115 V.
 - c. Hertz: 60.
 - 2. Motor Type and Controller: Reversible motor and controller (disconnect switch) for motor exposure indicated.
 - 3. Motor Size: Minimum size as indicated. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not

- less than 8 in./sec. (203 mm/s) and not more than 12 in./sec. (305 mm/s), without exceeding nameplate ratings or service factor.
4. Operating Controls, Controllers (Disconnect Switches), Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
- E. Obstruction Detection Device: Equip motorized door with indicated external automatic safety sensor capable of protecting full width of door opening. Activation of device immediately stops and reverses downward door travel.
1. Photoelectric Sensor: Manufacturer's standard system designed to detect an obstruction in door opening without contact between door and obstruction. Provide self-monitoring capability designed to interface with door-operator control circuit to detect damage to or disconnection of sensor device.
 2. Sensor Edge: Automatic safety sensor edge, located within astragal or weather stripping mounted to bottom bar. Contact with sensor activates device. Connect to control circuit using manufacturer's standard take-up reel or self-coiling cable. Provide self-monitoring capability designed to interface with door-operator control circuit to detect damage to or disconnection of sensor device.
- F. Remote-Control Station: Momentary-contact, three-button control station with push-button controls labeled "Open," "Close," and "Stop."
1. Interior units, full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
 2. Exterior units, full-guarded, standard-duty, surface-mounted, weatherproof type, NEMA ICS 6, Type 4 enclosure, key operated.
- G. Emergency Manual Operation: Equip each electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed 25 lb.
- H. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.
- I. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.
- J. Radio-Control System: Consisting of three-channel universal coaxial receiver to open, close, and stop door; [two] per operator.
- 2.07 DOOR ASSEMBLY
- A. Steel Sectional Door: Sectional door formed with hinged sections.
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. Metal Building Manufacturer's standard.
- B. Operation Cycles: Not less than 20,000.

- C. R-Value: 16.2 deg F x h x sq. ft. /Btu.
- D. Steel Sections: Zinc-coated (galvanized) steel sheet, formed into sections 2 inches thick.
 - 1. Exterior-Face Surface: Ribbed.
 - 2. Interior Facing Material: Zinc-coated (galvanized) steel sheet.
- E. Track Configuration: Standard-lift track.
- F. Weatherseals: Fitted to bottom and top around entire perimeter of door. Provide combination bottom weatherseal and sensor edge.
- G. Windows: Approximately 24 by 11 inches, with curved corners, and spaced apart the approximate distance as indicated on Drawings; in one row at height indicated on Drawings; installed with insulated glazing of clear polycarbonate plastic.
- H. Locking Devices: Equip door with locking device assembly and chain lock keeper.
 - 1. Locking Device Assembly: Single-jamb sidelocking bars, operable from inside with thumbturn.
- I. Manual Door Operator: Chain-hoist operator.
- J. Electric Door Operator:
 - 1. Usage Classification: Medium duty, up to 15 cycles per hour.
 - 2. Operator Type: Jackshaft, side mounted.
 - 3. Motor Exposure: Interior, clean, and dry.
 - 4. Emergency Manual Operation: Chain type.
 - 5. Obstruction-Detection Device: Automatic photoelectric sensor; self-monitoring type.
 - 6. Remote-Control Station: Interior and Exterior.
 - 7. Other Equipment: Radio-control system.
- K. Door Finish:
 - 1. Baked-Enamel or Powder-Coated Finish: Color and gloss as selected by Architect from manufacturer's full range.
 - 2. Finish of Interior Facing Material: Match finish of exterior section face.

PART 3 EXECUTION

3.01 INSTALLATION

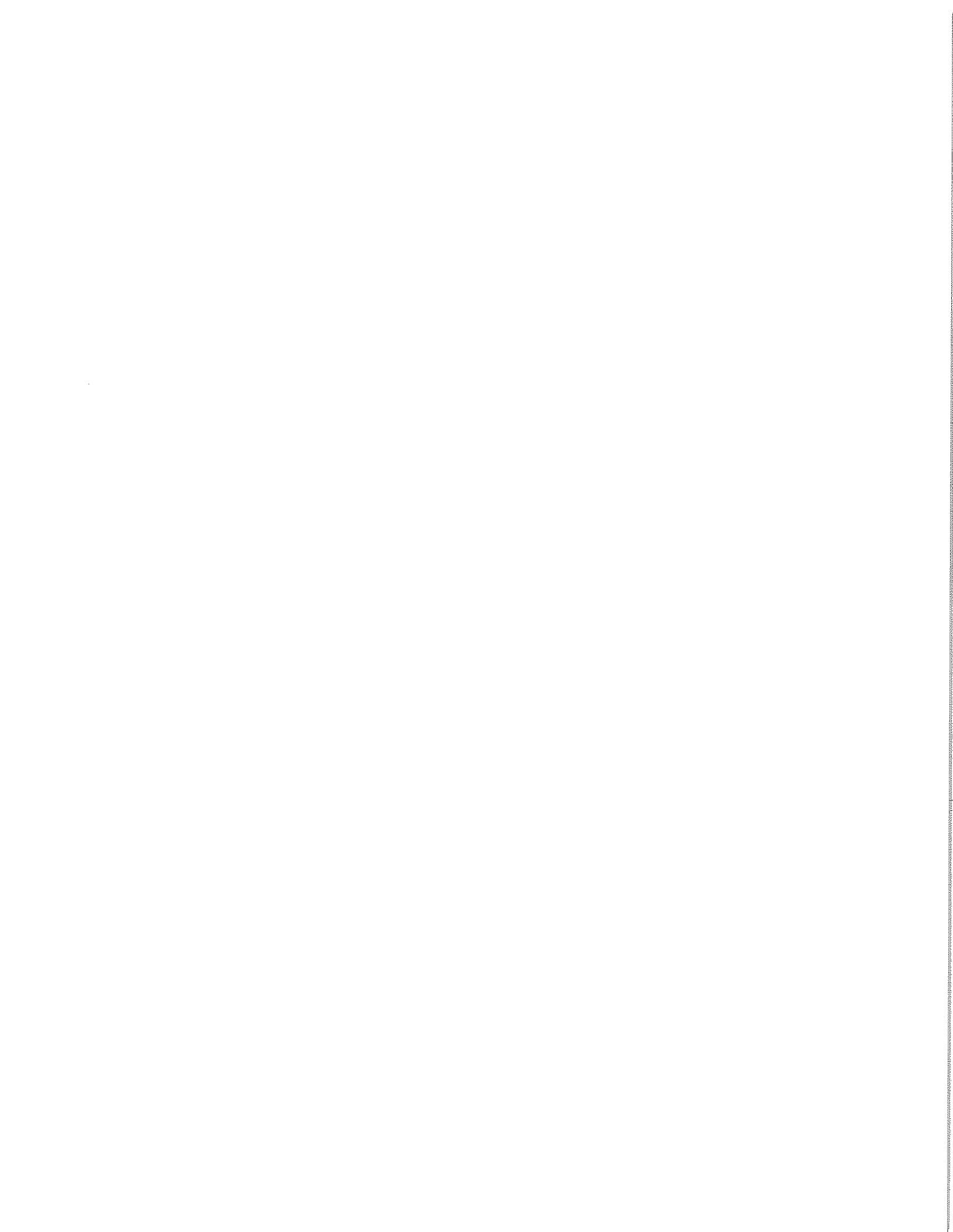
- A. Install sectional doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Tracks: Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track and door-operating equipment. Repair galvanized coating on tracks according to ASTM A 780.

- C. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion. Adjust doors and seals to provide weathertight fit around entire perimeter.

3.02 DEMONSTRATION

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

END OF SECTION



SECTION 13120

PREFABRICATED METAL BUILDING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Structural steel main building frames and secondary framing including purlins and girts, engineered and fabricated by the building systems supplier
- B. Insulated steel wall and roof system including soffits, gutters, and downspouts.

1.02 RELATED SECTIONS

Section – 03300 Cast-In-Place Concrete
Section – 08110 Steel Doors and Frames
Section – 08361 Sectional Overhead Doors

1.03 REFERENCES

AISI - Specification for the Design of Cold-Formed Steel Structural Members
AISC - Specification for Structural Steel Buildings
AWS D1.1-94 - Structural Welding Code - Steel.
AWS D1.3-89 - Structural Welding Code - Sheet Steel.
MBMA Low Rise Building Systems Manual

1.04 SYSTEM DESCRIPTION

- A. Clear span rigid frame
- B. Bay spacing by Metal Building Supplier to locate frames between overhead doors.
- C. Primary Framing: Rigid frame of rafter beams and columns (tapered or straight), end wall columns, and wind bracing.
- D. Secondary Framing: Purlins, girts, canopy beams, and other items detailed.
- E. Lateral Bracing: Horizontal loads not resisted by main frame action shall be resisted by cable and/or diaphragm in the sidewall and diaphragm and/or cable in the roof.
- F. Wall and Roof System: Preformed steel panels, insulation, liner sheets, and accessory components
- G. Roof slope: 1 inch vertical to 12 inch horizontal minimum.

1.05 DESIGN REQUIREMENTS

- A. Members to withstand building system loads as required by the Town of Crested Butte, which has adopted the 2009 International Building Code (IBC) with amendments. All loads shall be proportioned and applied in accordance with the 2009 IBC.

- B. Deflection requirements shall be in accordance with the applicable provisions of the 2009 IBC.

1.06 SUBMITTALS

- A. Shop drawings showing anchor bolt placement, column reactions, and building construction details for Engineer's review and approval.
- B. Calculations for Engineer's review and approval.
- C. Door and window specifications and details, including door motorized operators if applicable.

1.07 QUALIFICATIONS

- A. Manufacturer: The Company manufacturing the products specified in this Section shall be certified under the American Institute of Steel Construction's MB Certification Program.
- B. Designer: Structural foundation, framing and covering shall be the design of a Colorado licensed Professional Engineer experienced in design of this work.
- C. Supplier: The building system supplier or metal roof system supplier shall be a manufacturer's authorized and franchised dealer of the system to be furnished.
- D. Installer: The building system or roof system installer shall be regularly engaged in the installation of building systems of the same or equal construction to the system specified.

1.08 WARRANTY

- A. Building manufacturer shall provide manufacturer's standard signed written material and weather tightness warranty arising out of or caused by ordinary wear and tear or perforation due to corrosion under normal weather and atmospheric conditions.
- B. Metal building contractor shall provide a standard signed workmanship warranty.

PART 2 - PRODUCTS

2.01 MATERIALS AND FABRICATION

- A. Roof System
 1. Sheet steel stock: Galvanized (G-90 coating), per ASTM specification A 653 (G90) as required by manufacturer's design.
 2. Standing Seam Roofing: Minimum 24 gauge, 1 ½" minimum thickness, UL 90 rated, mechanical seam edges, factory applied side lap sealant, and field applied end lap sealant.
 3. Soffit panels: Minimum 24 gauge, perforated for ventilation.
 4. Closures: Manufacturer's standard type

5. Fasteners: Manufacturer's standard type and finish to match adjacent surfaces when exterior exposed. Size to maintain load and weather tightness requirements.
 6. Sealant: Manufacturer's standard type
 7. Exterior Surface of Roof Panels: precoated steel with a Kynar 500® or Hylar 5000® fluoropolymer (PVDF) coating. Color as selected from manufacturer's standard range.
- B. Wall Systems
1. Sheet steel stock: Galvanized (G-90 coating), per ASTM specification A 653 (G90) as required by manufacturer's design.
 2. Siding: 26 or 24 gauge, 1 ½" minimum thickness, lapped edges
 3. Interior wall panel: Manufacturer's standard type
 4. Closures: Manufacturer's standard type
 5. Fasteners: Manufacturer's standard type and finish to match adjacent surfaces when exterior exposed. Size to maintain load and weather tightness requirements.
 6. Exterior and Interior Surface of Wall Panels: precoated steel with a Kynar 500® or Hylar 5000® fluoropolymer (PVDF) coating. Color as selected from manufacturer's standard range.
- C. Flashings, Internal and External Corners, Closure Pieces, Fascia, Infills, Caps, and all other Trim required: Same material and finish as adjacent material, profile to suit system, color as selected from manufacturer's standard range.
- D. Insulation: Glass fiber type, faced with reinforced white vinyl, UL flame spread classification of 25 or less where exposed. R-value shall meet minimum Town of Crested Butte Building Code requirements.
- E. Primary Framing
1. Rigid Frames
 - a. Frames shall consist of welded-up plate section columns and roof beams complete with necessary splice plates for bolted field assembly.
 - 1) All base plates, cap plates, compression splice plates and stiffener plates shall be factory welded into place and have the connection holes shop fabricated.
 - 2) Columns and roof beams shall be fabricated complete with holes in webs and flanges for the attachment of secondary structural members and bracing except for fieldwork as noted on manufacturer's erection drawings.
 - b. All bolts for field assembly of frame members shall be ASTM A325 high strength bolts as indicated on erection drawings.
 2. Endwall Structurals
 - a. The endwall structurals shall be cold-formed channel members designed in accordance with the 2004 AISI Specification or welded-up plate sections designed in accordance with the 2005 AISC Specification.
 - b. Endwall frames shall consist of endwall corner posts, endwall roof beams and endwall posts as required by design criteria.
 - 1) All splice plates and base clips shall be shop fabricated complete with bolt connection holes. All base plates, cap plates, compression splice

plates and stiffener plates shall be factory welded into place and have the connection holes shop fabricated.

- 2) Beams and posts shall be shop fabricated complete with holes for the attachment of secondary structural members except for field work as noted on manufacturer's erection drawings.
- c. Intermediate frames shall be substituted for end-wall roof beams when specified.
 - 1) Necessary endwall posts and holes for connection to the intermediate frame used in the endwall shall be shop fabricated.
3. Clean in accordance with SSPC-SP2, prepare, and coat with building manufacturer's standard primer.

F. Secondary Structural Members

1. Purlins
 - a. "Z" shaped, precision roll formed steel in different gauges to meet the specified loading conditions.
 - b. 8" or 9-1/2 " deep sections
 - c. Outer flange of purlins shall contain factory punched holes for panel connections
 - d. Clean in accordance with SSPC-SP8 or SSPC-SP6 and apply a hot dipped zinc coating per ASTM A653 G-30 specification followed by one coat of clear acrylic finish
2. Eave Members
 - a. Eave Struts shall be factory punched 8", 9-1/2", or 11" deep "C" sections precision roll formed steel in different gauges to meet the specified loading conditions.
3. Girts
 - a. "Z" shaped, precision roll formed steel in different gauges to meet the specified loading conditions.
 - b. 8" or 9-1/2" deep sections
 - c. Outer flange of all girts shall contain factory-punched holes for panel connections.
 - d. Clean in accordance with SSPC-SP8 or SSPC-SP6 and apply a hot dipped zinc coating per ASTM A653 G-30 specification followed by one coat of clear acrylic finish
4. Bracing
 - a. Diagonal bracing shall be hot-rolled rod of size indicated on drawings, and attached to columns and roof beams as shown on the drawings.
 - b. Optional fixed base wind posts or pinned base portal frames may be substituted for wall rod bracing on buildings as required.
 - c. Flange braces, purlin braces, etc., when required, shall be cold-formed and installed as indicated on drawings.

G. Accessories

1. Framed openings
 - a. "Z" or "C" shaped, precision roll formed steel
 - b. 8" or 9-1/2 " deep sections
 - c. Clean in accordance with SSPC-SP8 or SSPC-SP6 and apply a hot dipped zinc coating per ASTM A653 G-30 specification followed by one coat of clear acrylic finish

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position.
- B. Provide access to the work as scheduled for inspections, if required.

3.02 ERECTION

- A. Framing
 - 1. Erect framing in accordance with MBMA Low Rise Building Systems Manual, Common Industry Practices and manufacturer's erection drawings.
 - 2. The erector shall furnish temporary guys and bracing where needed for squaring, plumbing, and securing the structural framing against loads, such as wind loads acting on the exposed framing and seismic forces, as well as loads due to erection equipment and erection operation, but not including loads resulting from the performance of work by others. Bracing furnished by the manufacturer for the metal building system cannot be assumed to be adequate during erection. The temporary guys, braces, falseworks and cribbing are the property of the erector, and the erector shall remove them immediately upon completion of erection.
 - 3. Do not field cut or alter structural members without approval of the metal building manufacturer.
 - 4. After erection, prime welds, abrasions, and surfaces not shop primed
- B. Wall and Roofing Systems
 - 1. Install in accordance with manufacturer's instructions.
 - 2. Exercise care when cutting prefinished material to ensure cuttings do not remain on finish surface.
 - 3. Fasten cladding system to structural supports, aligned level and plumb.
- C. Doors and Windows
 - 1. Install in accordance with manufacturer's instructions.
 - 2. Adjust to plumb and level; install weather-stripping and thresholds to provide tight seal. Cycle and adjust to ensure proper operation.
- D. Gutters and Downspouts
 - 1. Install gutters and downspouts in accordance with manufacturer's instructions
 - 2. Connect downspout as shown on drawings

END OF SECTION



Exhibits

2015 Crested Butte Vehicle Storage Building



Town Project No. N/A

**CONSTRUCTION CONTRACT (TOWN PROJECT MANAGER)
FOR THE FOLLOWING PROJECT:
2015 CRESTED BUTTE VEHICLE STORAGE BUILDING**

This Construction Contract, effective this 20th day of August, 2015, by and between Professional Contractors, Inc. (PCI) (hereinafter, "Contractor"), a corporation organized pursuant to the laws of the State of Colorado and located at 125 N. Main St., Suite B Gunnison, CO 81230 and the **TOWN OF CRESTED BUTTE** (hereinafter, "Town" or "Owner"), a home-rule municipality organized pursuant to the laws of the State of Colorado, located at 507 Maroon Avenue, P.O. Box 39, Crested Butte, Colorado 81224, provides that the Contractor and Town, in consideration of the mutual covenants hereinafter set forth, agree as follows:

PART 1 – WORK; TIME

1.01 The Contractor agrees to furnish all of the technical, administrative, professional, and other labor, all supplies and materials, equipment, printing, vehicles, local travel, office space and facilities, testing and analyses, calculations, and any other facilities or resources necessary to perform in a workmanlike manner all Work required by the Contract Documents.

1.02 The Contractor agrees to undertake the performance of the Work within ten (10) days after receipt of the Notice to Proceed and agrees that the Work will be completed by December 31st, 2015 unless the contract time is extended by the Town as provided in the Contract Documents.

1.03 The Parties agree that, in any section in which the Contractor prepares any document for "the approval of the Town," such approval does not mean that Town is responsible for the accuracy, thoroughness, or judgment contained in the document. Town does not waive the right to hold the Contractor responsible for the accuracy, thoroughness, or judgment expressed in the document, as it is expressly agreed by the Parties that the Town is relying on the expertise of the Contractor.

1.04 Omitted

PART 2 - CONTRACT PRICE AND PAYMENT

2.01 The Town shall pay the Contractor for performance of the Work in accordance with the Contract Documents the amount(s) shown on Contractor's Bid Proposal, not to exceed **Two hundred thirty thousand eight hundred eighty seven Dollars (\$ 230,887.00)**.

2.02 The Town shall make payments as set forth in Article 9 of the General Conditions, subject to the Town's obligation to retain a portion of the payments until final completion and acceptance by the Town of all Work included in the Contract Documents.

2.03 Prior to final payment, all Work specified by the Contract Documents must be completed. Payment shall be made only after the procedure specified by the General Conditions is completed.

2.04 The Town represents that either an appropriation for the price specified in this Construction Contract

has been made by the Town Council or that sufficient funds have otherwise been made available for the payment of this Construction Contract.

2.05 Omitted

PART 3 - CONTRACTOR'S REPRESENTATIONS

3.01 In order to induce the Town to enter into this Construction Contract, the Contractor makes the following representations:

(a) The Contractor has familiarized himself with the nature and the extent of the Contract Documents, Work, the location and site of the Work and all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

(b) Contractor has carefully studied all physical conditions at the site and existing facilities affecting cost, progress or performance of the Work.

(c) Contractor has given the Town written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by the Town is acceptable to the Contractor.

3.02 Contractor agrees to remedy all defects appearing in the Work or developing in the materials furnished and the workmanship performed under this Construction Contract for a period of one (1) years or such other time that is specified in the Contract Documents after the date of acceptance of the Work by the Town, and further agrees to indemnify and save the Town harmless from any costs encountered in remedying such defects. Contractor shall provide a performance bond that shall remain in effect until all defects are corrected as required by this paragraph.

3.03 Contractor is an independent contractor and nothing herein contained shall constitute or designate the Contractor or any of its employees or agents as agents or employees of the Town.

PART 4 - CONTRACT DOCUMENTS

4.01 The Contract Documents, which comprise the entire Construction Contract between the Town and the Contractor, are attached to this Construction Contract and made a part hereof, including:

Bid Packet, including but not limited to Bid Notice, Invitation to Bid, Instructions to Bidders, Bid Form, NonCollusion Affidavit of Prime Bidder, Bidder's Certification, Bid Bond, and any attachments and exhibits

Notice of Award

Notice to Proceed

Construction Contract

Construction Drawings

Performance Bond

Payment Bond

General Conditions, including table of contents

Special Conditions

Addendum

Project Specifications

Change Orders
Insurance Certificates
Tax-Exempt Certificates

In the event of an inconsistency between any provisions of the Contract Documents, the more specific provisions shall govern the less specific provisions, and written addenda, change orders, or other modifications approved in writing by both parties shall govern the original documents.

4.02 There are no Contract Documents other than those listed above. The Contract Documents may only be altered, amended or repealed by a modification, in writing, executed by the Town and the Contractor.

PART 5 - PROJECT MANAGER

5.01 The Project Manager, for the purposes of the Contract Documents, is the following, or such other person or firm as the Town may designate in writing:

Name: Rodney Due, Public Works Director
Address: 507 Maroon Ave., Crested Butte, CO, 81224
Telephone: (970) 349-5338

The Project Manager is authorized to represent and act as agent for the Town with respect to Town's rights and duties under the Contract Documents, provided, however, the Project Manager shall not have any authority to approve any Change Order or approve any amendment to the Construction Contract or Contract Documents, except for those minor Change Orders defined in paragraph 7.4.1 of the General Conditions, such authority being specifically reserved to the duly authorized official of the Town having such approval authority pursuant to the Town's Charter and ordinances. In the event of doubt as to such authority, the Contractor may request a written representation from the Town Manager resolving such doubt and designating the person with authority under the circumstances, which written representation shall be conclusive and binding upon the Town.

PART 6 - ASSIGNMENT

6.01 No assignment by a party hereto of any rights under or interest in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents. This restriction on assignment includes, without limitation, assignment of the Contractor's right to payment to its surety or lender.

6.02 It is agreed that this Construction Contract shall be binding on and inure to the benefit of the parties hereto, their heirs, executors, administrators, assigns and successors.

PART 7 - GOVERNING LAW AND VENU

7.01 This Construction Contract shall be governed by the laws of the State of Colorado and the Charter of the Town of Crested Butte and the Crested Butte Municipal Code.

7.02 This Construction Contract shall be deemed entered into in Gunnison County, State of Colorado. The location for settlement of any and all claims, controversies and disputes arising out of or related to this Construction Contract or any breach thereof, whether by alternative dispute resolution or litigation, shall be proper only in Gunnison County.

PART 8 - LIQUIDATED DAMAGES

8.01 The Town and the Contractor recognize that time is of the essence in this Construction Contract and that the Town will suffer financial loss if the Work is not substantially completed within the time specified in paragraph 1.02 above, plus any extensions thereof allowed by the Town by written Change Order. They also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by the Town if the Work is not substantially complete on time. Accordingly, rather than requiring any such proof, the Town and the Contractor agree that as liquidated damages for delay (but not as a penalty) the Contractor shall pay the Town two hundred Dollars (\$200.00) for each day that expires after the time specified in paragraph 1.02 until the Work is complete. It is agreed that this is a reasonable estimate of the damages likely to be suffered by the Town for late completion of the Work. If the Contractor shall fail to pay such liquidated damages promptly upon demand therefor, the Surety on the Performance Bond shall pay such damages. Also, the Town may withhold all, or any part of, such liquidated damages from any payment due the Contractor.

PART 9 - MODIFICATIONS

This Construction Contract shall be modified only by written Change Orders or Addenda agreed upon by the parties hereto, duly issued in form approved by the Town Attorney and in conformance with the other Contract Documents.

PART 10 - AUTHORITY

The person or persons signing and executing this Construction Contract on behalf of each Party, do hereby warrant and guarantee that he/she or they have been fully authorized to execute this Construction Contract and to validly and legally bind such Party to all the terms, performances and provisions herein set forth.

PART 11 - CONTINGENCY

This Construction Contract is expressly contingent upon the approval of the Town of Crested Butte's Town Council of all of the terms set forth herein. In the event this Construction Contract is not approved in its entirety by the Town Council, neither Party shall be bound to the terms of this Construction Contract.

INSURANCE CERTIFICATES REQUIRED BY THE GENERAL CONDITIONS OF THIS CONTRACT SHALL BE SENT TO CRESTED BUTTE PUBLIC WORKS DEPARTMENT, ATTENTION: RODNEY DUE.

SIGNATURE PAGE FOLLOWS.

IN WITNESS WHEREOF, the parties hereto have executed this Construction Contract in triplicate. Two counterparts have been delivered to the Town and one counterpart has been delivered to the Contractor. All portions of the Contract Documents have been signed or identified by the Town and the Contractor.

CONTRACTOR

By: Mart Klimowski
Printed Name: Martin Klimowski
Title: Owner Professional Contractors Inc.

Attest: Mart Klimowski
Secretary

(Corporate Seal,
if applicable)

Address for giving notice:
P.O. Box 432
Gunnison, CO 81230

TOWN OF CRESTED BUTTE

By: Aaron J. Huckstep
Printed Name: Aaron J. Huckstep
Title: Mayor

Attest: Deanne Steiner
Town Clerk

(Seal)



Address for giving notice:
507 Maroon Avenue
P.O. Box 39
Crested Butte, Colorado 81224

Approved as to legal form:
[Signature]
Town Attorney

I certify that either an appropriation has been made by the Town Council or that sufficient funds have otherwise been made available for the payment of this Construction Contract.

[Signature]
Town Manager

Account No. _____

EXHIBIT C TO REQUEST FOR BIDS
SPECIAL CONDITIONS TO THE CONSTRUCTION CONTRACT

(See Technical Specifications)



EXHIBIT B TO REQUEST FOR BIDS
GENERAL CONDITIONS TO THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

ARTICLE 1	GENERAL PROVISIONS
1.1	Definitions
1.2	Execution, Correlation and Intent
1.3	Ownership and Use of Documents
ARTICLE 2	OWNER
2.1	Information and Services Required of the Owner
2.2	Owner's Right to Stop the Work
2.3	Owner's Right to Carry Out the Work
ARTICLE 3	CONTRACTOR
3.1	Review of Contract Documents and Field Conditions by Contractor
3.2	Supervision and Construction Procedures
3.3	Labor and Materials
3.4	Reserved
3.5	Warranty
3.6	Taxes
3.7	Permits, Fees and Notices
3.8	Allowances
3.9	Superintendent
3.10	Contractor's Construction Schedule
3.11	Documents and Samples at the Site
3.12	Shop Drawings, Product Data and Samples
3.13	Use of Site
3.14	Cutting and Patching of Work
3.15	Cleaning Up
3.16	Communications
3.17	Royalties and Patents
3.18	Indemnification
3.19	Attorneys Fees
ARTICLE 4	ADMINISTRATION OF THE CONTRACT
4.1	Project Manager
4.2	Project Manager's Administration of the Construction Contract
4.3	Claims and Disputes
4.4	Resolution of Claims and Disputes
ARTICLE 5	SUBCONTRACTORS

5.1	Award of Subcontracts and Other Contracts for Portions of the Work
5.2	Subcontractual Relations
5.3	Contingent Assignment of Subcontracts
ARTICLE 6	CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
6.1	Owner's Right to Perform Work and to Award Separate Contracts
6.2	Mutual Responsibility
6.3	Owner's Right to Clean Up
ARTICLE 7	CHANGES IN THE WORK
7.1	Changes
7.2	Change Orders
7.3	Construction Change Directives
7.4	Minor Changes in the Work
ARTICLE 8	TIME
8.1	Date of Commencement of the Work
8.2	Progress and Completion
8.3	Delays and Extensions of Time
ARTICLE 9	PAYMENTS AND COMPLETION
9.1	Contract Sum
9.2	Schedule of Values
9.3	Applications for Payment
9.4	Certificates for Payment
9.5	Decisions to Withhold Certification
9.6	Progress Payments
9.7	Failure of Payment
9.8	Substantial Completion
9.9	Partial Occupancy or Use
9.10	Final Completion and Final Payment
ARTICLE 10	PROTECTION OF PERSONS AND PROPERTY
10.1	Safety Precautions and Programs
10.2	Safety of Persons and Property
10.3	Emergencies
10.4	Use of Explosives, Driving or Removal of Piles, Wrecking, Excavation Work or Other Similar and Potentially Dangerous Work
10.5	Underground Utilities
ARTICLE 11	INSURANCE REQUIREMENTS
11.1	Contractor's Insurance
11.2	Additional Named Insured
11.3	Builder's Risk/Property Insurance
11.4	General Requirements

ARTICLE 12	UNCOVERING AND CORRECTION OF WORK
12.1	Uncovering of Work
12.2	Correction of Work
12.3	Acceptance of Defective or Non-Conforming Work
ARTICLE 13	MISCELLANEOUS PROVISIONS
13.1	Governing Law
13.2	Successors and Assigns
13.3	Written Notice
13.4	Claims for Damages
13.5	Performance and Payment bond
13.6	Rights and Remedies
13.7	Tests and Inspections
13.8	Litigation and Work Progress
13.9	Equal Employment Opportunity
13.10	Commercial Driver's License Substance Screening
ARTICLE 14	TERMINATION OF THE CONTRACT
14.1	Termination by the Contractor
14.2	Termination by the Owner for Cause
14.3	Suspension by the Owner for Convenience

ARTICLE 1

GENERAL PROVISIONS

1.0 This Construction Contract is expressly contingent upon the approval of the Town of Crested Butte's Town Council of all of the terms set forth herein. In the event this Construction Contract is not approved in its entirety by Town Council neither Party shall be bound to the terms of this Construction Contract.

1.1 DEFINITIONS

- 1.1.1 "Application for Payment" means the Contractor's request for payment submitted to the Project Manager according to the process set forth in paragraphs 9.3.1- 9.3.4.
- 1.1.2 "Bidding Documents" means the Bid Packet including its Bid Notice, Invitation to Bid, Instructions to Bidders, Bid Form, Non-Collusion Affidavit of Prime Bidder, Bidder's Certification, Bid Bond, and any attachments and exhibits to the Bid Packet.
- 1.1.3 "Certificate for Payment" means the amount approved for payment by the Project Manager after the receipt of the Contractor's Application for Payment, as more fully defined in paragraph 9.4.1.
- 1.1.4 "Change Order" means a written order to the Contractor, signed by the Contractor and the Owner stating their agreement upon a change in the Work; the amount of the adjustment in the Contract Sum, if any; or the extent of the adjustment in the Contract Time, if any, as more fully defined in paragraph 7.2.
- 1.1.5 "Claim" means a demand or assertion by one of the parties seeking, as a matter of right, adjustment of contract terms, payment of money, extension of time, or other relief with respect to the terms of the Construction Contract, or other disputes between the Owner and Contractor arising out of or relating to the Construction Contract.
- 1.1.6 "Construction Change Directive" means a written order directed to the Contractor and signed by the Owner, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both, as defined more fully in paragraphs 7.3.1-7.3.9.
- 1.1.7 "Construction Contract" or "Contract" means the entire and integrated agreement between the parties hereto, evidenced by the Contract Documents, which supersedes all prior negotiations, representations, or agreements, either written or oral, subject only to amendment or modification as permitted by Article 7.
- 1.1.8 "Contract Documents" means the Construction Contract, the Conditions of the Contract (General, Special, Supplementary and other Conditions), the Drawings, the Specifications, all Addenda issued prior to and all Modifications issued after execution of the Contract, and all other documents listed in the Contract, including the Bidding Documents, the Notice of Award, Notice to Proceed; Performance Bond; Payment Bond; Certificates of Insurance; and Tax-Exempt Certificates. Nothing contained in the Contract Documents creates any contractual relationship between the Owner any subcontractor, sub-subcontractor, or supplier of equipment or materials (except as provided in paragraph 5.4 hereof).

- 1.1.9 “Contract Sum” means the amount stated in paragraph 2.01 of the Construction Contract and, including authorized adjustments thereto, is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents.
- 1.1.10 “Contract Time” means the period of time allotted in the Contract Documents for Substantial Completion of the Work, including authorized adjustments thereto.
- 1.1.11 “Contractor” means the person or entity identified as such in the Construction Contract or an authorized representative thereof.
- 1.1.12 “Date of Commencement of the Work” is the date established in the Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Construction Contract or such other date as may be established therein.
- 1.1.13 The “Date of Substantial Completion” is the date certified by the Project Manager in accordance with paragraph 9.8.
- 1.1.14 “Day” as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.
- 1.1.15 “Drawings” are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
- 1.1.16 “Final Completion” means the finding by the Project Manager that the final Certificate for Payment should be issued based on his knowledge, information and belief that the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate for Payment, is due and payable, as more fully defined in paragraph 9.10.1.
- 1.1.17 “Modification” means (1) a written amendment to the Construction Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written Order for a Minor Change in the Work approved by the Owner pursuant to paragraph 7.4.
- 1.1.18 “Notice to Proceed” means the form issued by the Town and accepted in writing by the Contractor that notifies Contractor to begin work on or before a date certain, establishes an end date, and returns bid security.
- 1.1.19 “Order for a Minor Change in the Work” means an order issued by the Project Manager adjusting the Contract Sum or extending the Contract Time as permitted by paragraph 7.4.1.
- 1.1.20 “Owner” means the person or entity identified as such in the Construction Contract or an authorized representative thereof. The term “Town” may be used interchangeably with the term “Owner.”
- 1.1.21 “Project” means the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.
- 1.1.22 “Project Manager” means the Town representative identified as such in Part 5 of the Contract.

- 1.1.23 "Project Manual" means the volume usually assembled for the Work which may include the bidding requirements, sample forms, conditions of the Contract, and Specifications.
- 1.1.24 "Specifications" or "Project Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, and workmanship for the Work, and performance of related services.
- 1.1.25 "Subcontractor" means a person or entity who has a direct contract with the Contractor to perform any of the Work at the site or an authorized representative thereof. "Subcontractor" does not include any separate contractor or his subcontractor.
- 1.1.26 "Substantial Completion" means the stage in the progress of the Work when the Work (or designated portion thereof that the Owner agrees to accept separately) is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or use the Work for its intended use as more fully explained in paragraph 9.8.1.
- 1.1.27 "Sub-subcontractor" means a person or entity who has a direct or indirect contract with a subcontractor to perform any of the Work at the site or an authorized representative thereof.
- 1.1.28 "Underground Utilities" means any below ground line, structure, facility or installation used by a utility or service provider including, but not limited to, telephone company lines, cable and conduit; cable television lines, cable and conduit; internet lines, cable and conduit; sewer lines and water lines, including individual sewer and water service lines; stormwater lines; gas lines; electrical lines, cables and conduit; and traffic signal lines, cable and conduit.
- 1.1.29 "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations for the completed construction required by the Contract Documents. The Work may constitute the whole or a part of the Project.

1.2 EXECUTION, CORRELATION AND INTENT

- 1.2.1 The Contract Documents shall be signed in not less than triplicate by the Owner and Contractor and shall be maintained by the Project Manager.
- 1.2.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents. In connection with the foregoing, and having carefully examined all Contract Documents, as aforesaid, and having visited the Site, and having familiarized himself with the site construction circumstances of the Project, the Contractor acknowledges and declares that it has no knowledge of any discrepancies, omissions, ambiguities, or conflicts in said Contract Documents and that if it becomes aware of any such discrepancies, omissions, ambiguities, or conflicts, it will promptly notify Owner and Project Manager of such fact.
- 1.2.3 The Contract Documents include all items necessary for the proper execution and completion of the Work by the Contractor. The Work shall consist of all items specifically included in the Contract Documents as well as all additional items of work which are reasonably inferable from that which is specified in order to complete the Work in accordance with the Contract Documents. The Contract Documents are complementary, and what is required by any one Contract Document shall be as binding

as if required by all. Any differences between the requirements of the Drawings and the Specifications or any differences within the Drawings themselves or within the Specifications themselves have been referred to the Owner by Contractor prior to the submission of bids and have been clarified by an Addendum issued to all Bidders. If any such differences or conflicts were not called to the Owner's attention prior to submission of bids, the Project Manager shall decide which of the conflicting requirements will govern based upon the most stringent of the requirements, and subject to the approval of the Owner, the Contractor shall perform the work at no additional cost or time to the Owner in accordance with the Project Manager's decision. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results.

1.2.4 The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of Work to be performed by any trade.

1.2.5 Unless otherwise stated in the Contract Documents, words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

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

1.2.7 For purposes of interpretation of Contract Documents, masculine includes both the masculine and the feminine; singular includes the singular and the plural; headings are for reference only and are not substantive

1.3 OWNERSHIP AND USE OF DOCUMENTS

1.3.1 The Drawings, Specifications, and other similar or related documents and copies thereof are furnished to the Contractor for the purpose of performing the Work and are, and shall remain, the property of the Owner. The Contractor may retain one record set. Neither the Contractor nor any subcontractor, sub-subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications and other similar or related documents, and Owner will retain all common law, statutory, and other reserved rights, in addition to the copyright (including, without limitation, the right to create derivative works therefrom). All copies of such documents shall be returned to the Owner upon completion of the Work. The Drawings, Specifications, and other similar or related documents and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any subcontractor, sub-subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner. The Contractor, subcontractors, sub-subcontractors and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications and other documents appropriate to and solely for use in the execution of their Work under the Contract Documents. All copies made under this license shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of any copyright or other reserved rights.

ARTICLE 2

OWNER

2.1 INFORMATION AND SERVICES REQUIRED OF THE OWNER

2.1.1 The Owner shall furnish surveys describing the physical characteristics, legal limitations and utility locations, if such utilities are the property of Owner, for the site of the Project, and a legal description of the site, if necessary. The Contractor shall undertake such further investigations and studies as may be necessary or useful to determine site characteristics and conditions. In connection with the foregoing, Contractor shall locate prior to performing any work, all Underground Utilities. If utility locate services are provided in the field by utility owners, Contractor nonetheless remains solely responsible to determine the actual location of all Underground Utilities.

2.1.2 Except for permits and fees which are the responsibility of the Contractor under the Contract Documents, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Such approvals and the like shall be provided by Owner within a time and in a manner as to avoid any unreasonable delays in the Work or schedule of Contractor and shall include only such approvals for permanent facilities which are necessary to perform the Work as set forth in the Contract Documents.

2.1.3 Information or services required to be furnished by Owner shall be furnished by the Owner with reasonable promptness to avoid unreasonable delay in the orderly progress of the Work.

2.1.4 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of Drawings and Specifications reasonably necessary for the execution of the Work.

2.1.5 The Owner shall forward all instructions to the Contractor through the Project Manager.

2.1.6 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Work by Owner or by Separate Contractors, Payments and Completion, and Insurance in Articles 6, 9, and 11 respectively.

2.2 OWNER'S RIGHT TO STOP THE WORK

2.2.1 If the Contractor fails to correct defective Work as required by Paragraph 12.2 or fails to carry out the Work in accordance with the Contract Documents, or fails or refuses to provide a sufficient amount of properly supervised and coordinated labor, materials, or equipment so as to be able to complete the Work within the Contract Time, or fails to remove and discharge (within ten days) any lien filed upon Owner's property by anyone claiming by, through, or under Contractor, or disregards the instructions of the Project Manager or Owner when based on the requirements of the Contract Documents, the Owner or the Project Manager, by a written order, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner and the Project Manager to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

2.3 OWNER'S RIGHT TO CARRY OUT THE WORK

2.3.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, or fails within such seven-day period to eliminate (or diligently commence to eliminate) the cause of any stop

work order issued under paragraph 2.3.1 hereof, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation and additional services and expenses made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

ARTICLE 3

CONTRACTOR

3.1 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

3.1.1 In addition to and not in derogation of Contractor's duties under paragraphs 1.2.2 and 1.2.3 hereof, Contractor shall carefully study and compare the Contract Documents and shall at once report to the Owner any error, inconsistency or omission discovered. The Contractor shall not be liable to the Owner for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents hereof unless the Contractor recognized or reasonably should have recognized such error, inconsistency or omission and failed to report it to the Owner. If the Contractor performs any construction activity involving an error, inconsistency or omissions in the Contract Documents that Contractor recognized or reasonably should have recognized, without such notice to the Owner, the Contractor shall assume complete responsibility for such performance and shall bear the full amount of the attributable costs for correction. The Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

3.1.1.1 If any errors, inconsistencies, or omissions in Contract Documents are recognized or reasonably should have been recognized by the Contractor, any member of its organization, or any of its subcontractors, the Contractor shall be responsible for notifying the Owner in writing of such error, inconsistency, or omission before proceeding with the Work. The Owner will take such notice under advisement and within a reasonable time commensurate with job progress, render a decision. If Contractor fails to give such notice and proceeds with such work, it shall correct any such error, inconsistency, or omission at no additional cost to Owner.

3.1.2 In addition to and not in derogation of Contractor's duties under paragraphs 1.2.2 and 1.2.3 hereof, the Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Project Manager at once.

3.1.3 The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to paragraph 3.12.

3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

3.2.1 The Contractor shall supervise and direct the Work, using his best skill and attention. The Contractor shall be solely (subject to the terms and provisions of Article 4 hereof), responsible for and have control over all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters. The Contractor shall review any specified construction or installation procedure, including those recommended by manufacturers, and shall advise the Owner if the

specified procedure deviates from good construction practice or if following the procedure will affect any warranties, and may propose any alternative procedure which the Contractor will warrant.

3.2.2 The Contractor shall be responsible to the Owner for the acts and omissions of his employees, subcontractors and their agents and employees, and other persons performing any of the Work under a contract or other arrangements with the Contractor. It is understood and agreed that the relationship of Contractor to Owner shall be that of an independent contractor. Nothing contained herein or inferable herefrom shall be deemed or construed to (1) make Contractor the agent, servant, or employee of the Owner, or (2) create any partnership, joint venture, or other association between Owner and Contractor. Any direction or instruction by Owner in respect of the Work shall relate to the results the Owner desires to obtain from the Work, and shall in no way affect Contractor's independent contractor status as described herein.

3.2.3 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Project Manager in his administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 13.7 by persons other than the Contractor.

3.2.4 The Contractor shall be solely responsible for locating all existing underground installations, including Underground Utilities and their service connections, in advance of excavating or trenching, by contacting the owners thereof and prospecting. Notwithstanding utility locate services that may be provided in the field by utility owners, Contractor remains ultimately responsible to determine the actual location of all Underground Utilities, facilities, structure, or installations. The Contractor shall use his own information and shall not rely upon any information shown or not shown on the plans or on field locates provided by the utility owner concerning existing Underground Utilities, facilities, structure, or installations. Any delay, additional work, or extra cost to the Contractor caused by existing Underground Utilities, facilities, structures or installations shall not constitute a claim for extra work, additional payment, or damage.

3.2.5 The Contractor has the responsibility to ensure that all equipment and material suppliers and subcontractors, their agents, and employees adhere to the Contract Documents, and that they order material and equipment on time, taking into account the current market and delivery conditions and that they provide equipment and materials on time. The Contractor shall coordinate its Work with that of all others on the Project, including deliveries, storage, installations, and construction utilities. The Contractor shall be responsible for the space requirements, locations, and routing of its equipment. In areas and locations where the proper and most effective space requirements, locations, and routing cannot be made as indicated, the Contractor shall meet with all others involved, before installation, to plan the most effective and efficient methods of overall installation.

3.2.6 The Contractor shall establish and maintain bench marks and all other grades, lines, and levels necessary for the Work, report errors or inconsistencies to the Owner before commencing work, and review the placement of the structure(s) and permanent facilities on the site with the Owner after all lines are staked out and before foundation work is started. Contractor shall provide access to the Work for the Owner, the Project Manager, other persons designated by Owner, and governmental inspectors. Any encroachments, as revealed by an improvement survey, made by Contractor or its subcontractors (of any tier) on adjacent properties due to construction, except for encroachments arising from errors or omissions not reasonably discoverable by Contractor in the Contract Documents, shall be the sole responsibility of the Contractor and Contractor shall correct such encroachments within thirty (30) days of the improvement survey (or as soon thereafter as reasonably possible), at Contractor's sole expense, either by the removal of the encroachment (and subsequent reconstruction on the project site) or agreement with the adjacent property owner(s) (in form and substance satisfactory to Owner in its sole discretion)

allowing the encroachments to remain.

3.3 LABOR AND MATERIALS

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

3.3.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.

3.3.3 Materials shall conform to manufacturer's standards in effect at the date of execution of the Construction Contract and shall be installed in strict accordance with manufacturer's directions. The Contractor shall, if required by the Owner, furnish satisfactory evidence as to the kind and quality of any materials. All packaged materials shall be shipped to the site in the original containers clearly labeled, and delivery slips shall be submitted with bulk materials identifying thereon the source, and warranting quality and compliance with Contract Documents.

3.3.4 When the Contract Documents require the Work, or any part of same, to be above the standards required by applicable laws, ordinances, rules, regulations, and other statutory provisions pertaining to the Work, such Work shall be performed and completed by the Contractor in accordance with the Contract Documents.

3.4 RESERVED

3.5 WARRANTY

3.5.1 The Contractor warrants to the Owner that all materials and equipment furnished under this Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.5.2 Experienced manufacturer's representatives shall be used to supervise the installation of equipment as may be required by the Owner. Any special tools or equipment which may be required for first class work shall be provided by the Contractor.

3.5.3 The acceptance at any time of materials or equipment by or on behalf of the Owner shall not be a bar to future rejection if they are subsequently found to be defective, inferior in quality or uniformity, to the material or equipment specified, or are not as represented to the Owner.

3.5.4 In the absence of detailed specifications, all materials shall conform to the latest standards of the American Society for Testing Materials (ASTM) available at the time notice inviting Contractors to bid is published unless otherwise indicated.

3.5.5 Any reference to standard specifications in any of the Contract Documents shall always imply the latest edition of such standard specifications or specifications available at the time notice inviting contractors to bid is published unless otherwise indicated.

3.5.6 Within one year after the date of Final Completion of the Work or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, the Contractor shall make all needed repairs arising out of defective workmanship or materials, or both, which in the judgment of the Owner shall become necessary during such period. If within ten (10) days after the mailing of a notice in writing to the Contractor or his agent, the Contractor shall neglect to make, or undertake with due diligence to make the aforesaid repairs, the Owner is hereby authorized to make such repairs at the Contractor's expense. In case of an emergency, the Contractor will be notified and shall correct and make repairs within the necessary time constraints. Failure of the Contractor to respond to the notification shall result in the Owner making the necessary repairs at the Contractor's expense. This obligation shall survive termination of the Contract.

3.5.7 Should the Owner claim by written communication before the warranty period expires that certain defects exist and that these require repair or replacement, the warranty period and applicable surety shall be automatically extended for as long as these defects remain unremedied.

3.6 TAXES

3.6.1 All sales of construction and building materials to contractors and subcontractors for use in the building, erection, alteration or repair of structures, highways, roads, streets and other public works owned and used by the Owner are exempt from State and other State-collected sales and use taxes and from Crested Butte sales and use taxes. However, such materials may be subject to sales and use taxes imposed by other local taxing authorities.

3.6.2 Prior to Town's issuance of the Notice to Proceed and start of work, the Contractor shall deliver to the Project Manager two copies of the completed and executed "Application for Exemption Certificate" with the approval of the Department of Revenue, State of Colorado, affixed. These certificates will serve as an indication to the Owner that the Contractor has acquired the necessary exemption for State and other State-collected sales and use taxes. The Contractor also agrees to make the same requirement, as contained above, of the material suppliers and subcontractors on this project.

3.6.3 Crested Butte use tax will be due on construction tools and equipment used on the Project if a legally imposed local sales or use tax was not paid on the full purchase price of these items. If such local sales or use tax was less than that of the Town of Crested Butte, Contractor, equipment suppliers, and subcontractors shall pay to Crested Butte the difference between such local sales or use tax and the tax imposed by Crested Butte. Any sales or use tax due Crested Butte may be prorated according to the time the tools or equipment are located within the Town, providing an equipment declaration form is properly filed with the Town.

3.6.4 All books and records pertaining to the Project that will allow the accurate determination of any tax due must be retained and be kept available for inspection by the Town for three years after the completion of the Project.

3.6.5 All applicable taxes are to be paid by Contractor and are to be included in appropriate bid items; except that, the Contractor shall not be reimbursed for any State or other sales or use taxes incurred as a result of failure to obtain an exemption certificate prior to Town's issuance of the Notice to Proceed.

3.6.6 A copy of the Construction Equipment Declaration for Proration of Municipal Use Tax form shall be obtained from the Town's Finance Department.

3.7 PERMITS, FEES AND NOTICES

3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall obtain any necessary building permit and applicable inspections and shall secure and pay for all other permits and governmental fees, licenses and inspections by other jurisdictions necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required.

3.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work.

3.7.3 It is not the responsibility of the Contractor to make certain that the Contract Documents are in accordance with applicable laws, statutes, building codes and regulations. If the Contractor observes or in the exercise of due care should observe that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Project Manager in writing, and any suggested changes shall be made to the Owner. The Contractor shall notify the Project Manager of all conflicts between the Drawings and Specifications and any laws, ordinances, rules, regulations, or restrictions that come to the Contractor's attention or should have come to his attention in the exercise of due care.

3.7.4 It is the responsibility of the Contractor to make certain that all his Work is done in accordance with applicable laws, statutes, building codes and regulations, and the Contractor shall bear any costs related to his failure to do so.

3.7.5 If the Contractor performs Work, including without limitations, the installation of any materials or equipment that it knows, or reasonably should know, would be contrary to laws, statutes, ordinances, building codes, rules, and regulations, the Contractor shall assume full responsibility for such work and shall bear all costs attributable to the correction thereof or related thereto, including all fines and penalties.

3.8 ALLOWANCES

3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by these allowances shall be supplied for such amounts and by such persons as the Owner may direct, but the Contractor will not be required to employ persons against whom he makes a reasonable objection.

3.8.2 Unless otherwise provided in the Contract Documents:

- .1 materials and equipment under an allowance shall be selected promptly by the Owner to avoid unreasonable delay in the Work;
- .2 these allowances shall cover the cost to the Contractor, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes;
- .3 the Contractor's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance;
- .4 whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other

expenses.

3.9 SUPERINTENDENT

3.9.1 The Contractor shall employ a competent Superintendent and necessary assistants who shall be in attendance at the Project site during the progress of the Work. The Superintendent shall represent the Contractor and all communications given to the Superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.

3.9.2 Contractor shall assign a person to be and remain the Superintendent to generally and directly supervise and coordinate the performance of the Work. The naming of such person is and was a material inducement to Owner to enter into the Contract. If such person is not the Superintendent or does not remain the Superintendent for any reason whatsoever, the Owner reserves the right to review and approve or disapprove said Superintendent's replacement, in Owner's sole discretion. If said replacement is disapproved, the Contract may, at Owner's option, be terminated for cause.

3.9.3 Owner shall have the right, upon notice, to demand that the Superintendent or other key personnel retained by Contractor be replaced by Contractor. In the event of such demand, Contractor shall, within seven (7) days after notification thereof, replace said individual(s) with an individual satisfactory to Owner, in Owner's sole discretion. If said replacement is disapproved, the Contract, may, at Owner's option, be terminated for cause.

3.10 CONTRACTOR'S CONSTRUCTION SCHEDULE

3.10.1 A preconstruction conference shall be scheduled at the time the Notice of Award is issued. The Contractor, at the preconstruction conference, shall prepare and submit for the Owner's review and approval a Contractor's construction schedule for the Work, in such form and detail as Owner may require. The schedule shall not exceed time limits current under the Contract Documents, shall be revised as required herein and at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. The schedule shall indicate the proposed starting and completion dates for the various subdivisions of the Work as well as the totality of the Work. The schedule shall be updated every thirty (30) days and submitted to the Project Manager with Contractor's applications for payment. Each schedule shall contain a comparison of actual progress with the estimated progress for such time stated in the original schedule. If any schedule submitted sets forth a date for Substantial Completion for the Work or any phase of the Work beyond the date(s) of Substantial Completion established in the Contract (as the same may be extended as provided in the Contract Documents), then Contractor shall submit to the Owner for its review and approval, a narrative description of the means and methods which Contractor intends to employ to expedite the progress of the Work to ensure timely completion of the various phases of the Work as well as the totality of the Work. To ensure such timely completion, Contractor shall take all necessary action including, without limitation, increasing the number of personnel and labor on the Project and implementing overtime and double shifts (with hours of work approved by the Project Manager). In that event, Contractor shall not be entitled to an adjustment in the Contract Sum or the Schedule.

3.10.2 The Contractor shall prepare and keep current, for the Project Manager's approval, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the Project Manager reasonable time to review submittals.

3.10.3 The Contractor shall conform to the most recent schedules.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

3.11.1 The Contractor shall maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes and selections (all changes and selections to be approved by the Owner in advance) made during construction, and approved Shop Drawings, Product Data and Samples and similar required submittals. These shall be available to the Project Manager and shall be delivered to him for the Owner upon completion of the Work.

3.11.2 At the date of Substantial Completion and as a condition precedent to Final Payment, the Contractor shall furnish the following documents (unless directed otherwise by Owner) to the Project Manager for submittal to the Owner: record drawings showing the field changes and selections affecting the general construction, mechanical, electrical, plumbing, and all other work, and indicating the Work as actually installed. These shall consist of carefully drawn markings on a set of reproducible prints of the Drawings. The Contractor shall maintain at the job site one (1) set of Drawings and indicate thereon each field change as it occurs.

3.11.3 All documents and records required to be prepared or maintained by Contractor for eventual delivery to the Owner shall be maintained and delivered in hard copy **and** in a electronic/digital format acceptable to the Owner.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specifically prepared for the Work by the Contractor or any subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

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

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

3.12.4 The Contractor shall review, approve and submit to the Owner, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents. Submittals made by the Contractor that are not required by the Contract Documents may be returned without action.

3.12.5 The Contractor shall not perform any portion of the Work requiring submittal and review of shop drawings, product data, samples, or similar submittals until the respective submittal has been approved by the Owner. Such Work shall be in accordance with approved submittals.

3.12.6 By approving and submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

3.12.7 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Owner's or Project Manager's approval of Shop Drawings, Product Data, Samples, or similar submittals unless the Contractor has specifically informed the Owner in writing of such deviation at the time of submission and the Owner has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data, Samples or similar submittals by the Owner's approval thereof.

3.12.8 The Contractor shall direct specific attention, in writing, on resubmitted Shop Drawings, Product Data, Samples, or similar submittals to revisions other than those required by the Owner on previous submittals.

3.12.9 When professional certification of performance criteria of materials, systems, or equipment is required of the Contractor by the Contract Documents, the Owner shall be entitled to rely in a reasonable and professional fashion upon the accuracy and completeness of such calculations and certifications. If any or all such calculations or certifications are found to be inaccurate or incomplete, Contractor shall assume full responsibility and bear all costs attributable or related thereto, including, without limitation, the expense of Owner's additional services associated with the verification of such calculations or certifications, and the expense of Owner's additional services made necessary by the failure of such calculations or certifications to be accurate or complete.

3.12.10 Contractor shall furnish Owner with copies of all operator's instructions, service and parts manuals, and all other literature received by Contractor from the manufacturer or supplier of equipment furnished under the Contract. All operator's instructions, service and parts manuals, and all other such literature shall be bound in permanent binders satisfactory to the Project Manager.

3.12.11 Copies of any manufacturer's guaranty or certificate as may be required by the Contract Documents or normally included with the product, shall be submitted to the Owner through the Project Manager prior to Substantial Completion of the Work issued by the Owner.

3.12.12 Throughout the progress of construction, the Contractor shall maintain a careful up-to-date record of all changes on the plans and drawings during actual construction. Upon completion of Work, and prior to Substantial Completion issued by the Owner, the Contractor shall file with the Project Manager one set of complete drawings with all changes and Contractor's field construction notes neatly and legibly recorded thereon. Such drawings shall indicate in part the exact routing, if changed from drawing location, of Underground Utilities, oxygen supply, condenser water lines, fuel oil tanks and lines, fire protection lines and any other major buried utility lines, and routing of conduit runs which are buried or concealed in concrete slabs. Such information may be used to prepare record drawings for the Owner.

3.12.13 All documents and records required to be prepared or maintained by Contractor for eventual delivery to the Owner shall be maintained and delivered in hard copy **and** in a electronic/digital format acceptable to the Owner.

3.13 USE OF SITE

3.13.1 The Contractor shall confine his construction operations to the immediate vicinity of the location shown on the plans and shall use due care in placing construction tools, equipment, excavated materials, materials and equipment for installation and supplies, so as to cause the least possible damage to property and interference with traffic. The placing of such tools, equipment, and materials shall be subject to the approval of the Project Manager. If it is necessary or desirable that the Contractor use land outside the Owner's right-of-way, the Contractor shall obtain consent from, and shall execute a written agreement with, the owner and tenant of the land and shall be responsible for all associated costs, including clean-up

and restoration.

3.13.2 The Contractor shall protect, shore, brace, support and maintain all Underground Utilities, drains, and underground construction uncovered or otherwise affected by the construction work performed by him.

3.14 CUTTING AND PATCHING OF WORK

3.14.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly. It is the intent of the Contract Documents that all areas requiring cutting and patching shall be restored to a completely finished condition acceptable to the Owner.

3.14.2 The Contractor shall not damage or endanger any portion of the Work or the work of the Owner or any separate contractors by cutting, patching or otherwise altering such work, or by excavation.

The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the prior written consent of the Owner and of such separate contractor. The Contractor shall not unreasonably withhold from the Owner or any separate contractor his consent to cutting or otherwise altering the Work.

3.15 CLEANING UP

3.15.1 The Contractor at all times shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials.

3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.

3.16 COMMUNICATIONS

3.16.1 The Contractor shall forward all communications to the Owner through the Owner's Project Manager, except as the Owner may otherwise direct in writing.

3.17 ROYALTIES AND PATENTS

3.17.1 The Contractor shall protect, defend, indemnify and save harmless the Owner, and each of Owner's officers, agents, servants and employees, including the Project Manager from liability of any nature or kind, including cost and expense for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the Owner, or the Owner's officers, agents, servants, or employees, unless otherwise specifically stipulated in the Contract Documents.

3.17.2 If the Contractor uses any design, device or materials covered by letters patent or copyright, he shall provide for such use by suitable agreement with the owner of such patented or copyrighted design, device or material. It is mutually agreed and understood that, without exception, the Contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the Work. The Contractor or his Surety shall indemnify and save harmless the Owner from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with Work agreed to be performed under the Contract, and

shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the Work or after completion of the Work.

3.17.3 The Contractor shall pay all royalty and license fees.

3.18 INDEMNIFICATION

3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify, defend and hold harmless the Owner and the Project Manager and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, but only to the extent caused by the negligent act or omission of, or breach of contract by, the Contractor, any subcontractor, any sub-subcontractor, supplier of equipment or materials, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph 3.18.

3.18.2 In any and all claims against the Owner or any of Owner's agents or employees by any employee of the Contractor, any subcontractor, any sub-subcontractor, any supplier of equipment or materials, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 3.18 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor, sub-subcontractor, supplier of equipment or materials under the workers' compensation act, disability benefit acts or other employee benefit acts.

3.18.3 RESERVED

3.18.4 The Contractor's indemnification hereunder shall apply without regard to whether acts or omissions of one or more of the Indemnitees hereunder would otherwise have made them jointly or derivatively negligent or liable for such damage or injury, excepting only that the Contractor shall not be obligated to so protect, defend, indemnify, and save harmless if such damage or injury is due to the sole negligence of one or more of the Indemnitees.

3.19 ATTORNEYS FEES

3.19.1 In the event it becomes necessary for either party to bring an action against the other to enforce any provision of this Construction Contract, in addition to any other relief that may be granted, the prevailing party in such action shall be entitled to an award of its reasonable attorney fees as determined by the Court.

ARTICLE 4

ADMINISTRATION OF THE CONTRACT

4.1 PROJECT MANAGER

4.1.1 Subject to the limitations set forth in paragraph 5.01 of the Construction Contract, the Project Manager is empowered to act for Owner during the construction of the Work.

4.1.2 In case of termination of employment of the Project Manager, Owner may at any time employ or retain any other person it may deem qualified to perform all or any part of the duties of the Project Manager hereunder or to exercise any of its rights hereunder. Owner shall notify all parties in writing, setting forth the scope of said replacement of Project Manager's duties and responsibilities, prior to making this change.

4.2 PROJECT MANAGER'S ADMINISTRATION OF THE CONTRACT

4.2.1 The Project Manager will provide administration of the Contract as described in the Contract Documents, and will be the Owner's representative during construction and until final payment is due. The Owner's instructions to the Contractor shall be forwarded through the Project Manager. The Project Manager will have authority to act on behalf of the Owner only to the extent provided in the Contract, unless otherwise modified by written instrument in accordance with other provisions of the Contract.

4.2.2 OMITTED

4.2.3 The Project Manager will not have control or charge of safety precautions and programs or any construction means, methods or decision-making in connection with the Work.

4.2.4 The Project Manager shall at all times have access to the Work wherever it is in preparation and progress.

4.2.5 Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized by Owner, the Owner and Contractor shall endeavor to communicate through the Project Manager, provided, however, that Owner may instruct, correspond, or negotiate with Contractor directly. Communications by and with subcontractors and suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Project Manager.

4.2.6 Based on the progress and quality of the Work, an evaluation of the Contractor's Applications for Payment, and all other information available, the Project Manager will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts as provided in paragraph 9.4.

4.2.7 The Project Manager will have the responsibility and authority to reject Work which does not conform to the Contract Documents. Whenever the Project Manager considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the Work in accordance with Paragraph 13.7 whether or not such Work has been fabricated, installed or completed.

4.2.8 The Project Manager will promptly review and approve or reject or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data, and Samples, for conformance with information given and the design concept expressed in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay in the Work or in the activities of the Contractor or separate contractors, while allowing sufficient time in the Project Manager's reasonable judgment to permit adequate review. The Project Manager's review of the Contractor's submittals shall not relieve the Contractor of any of Contractor's obligations under the Contract Documents. The Project Manager's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

4.2.9 The Project Manager will prepare Change Orders in accordance with Article 7, and will have authority to order Minor Changes in the Work as provided in paragraph 7.4.1. All Change Orders, Construction Change directives, and Field Directives shall require the approval of Owner in writing to be binding on Owner.

4.2.10 The Project Manager shall determine the date(s) of Substantial Completion and Final Completion, shall issue a Certificate of Substantial Completion when and as required by the Contract Documents, will receive, review, and maintain written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of the Contract Documents.

4.3 CLAIMS AND DISPUTES

4.3.1 Claims must be made by written notice to the Project Manager. The responsibility to substantiate claims shall rest with the party making the claim.

4.3.2 OMITTED

4.3.3 Time limits on Claims. Claims by either party must be made within 21 days after occurrence of the event giving rise to such claim or within 21 days after the claimant first recognizes, or reasonably should have recognized, the condition giving rise to the claim, whichever is later. An additional claim made after the initial claim has been implemented by change order will not be considered unless submitted in a timely manner.

4.3.4 Continuing Contract Performance. Pending final resolution of a claim, including litigation, unless otherwise directed by Owner in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

4.3.5 Waiver of Claims: Final Payment. The making and acceptance of Final Payment shall constitute a waiver of claims by the Owner except those arising from:

- .1 Liens, claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 Failure of the Work to comply with the requirements of the Contract Documents;
- .3 Terms of special warranties required by the Contract Documents; or
- .4 Faulty or defective Work appearing after Substantial Completion.

4.3.6 Claims for Concealed or Unknown Conditions. If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than seven (7) days after first observance of the conditions. Site conditions which an experienced and prudent contractor could have anticipated by visiting the site, familiarizing himself with the local conditions under which the Work is to be performed and correlating his observations with the requirements of the Contract Documents shall not be considered as claims for concealed or unknown conditions, nor shall the locations

of utilities which differ from locations provided by the utility companies. If the Owner determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Owner shall so notify the Contractor in writing, stating the reasons. Claims by the Contractor in opposition to such determination must be made within twenty-one (21) days after the Owner has given notice of the decision. If the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be subject to further proceeding pursuant to paragraph 4.4.

4.3.7 Claims for Additional Cost. If the Contractor wishes to make claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Said notice shall itemize all claims and shall contain sufficient detail and substantiating data to permit evaluation of same by Owner. No such claim shall be valid unless so made. Prior notice is not required for claims relating to an emergency endangering life or property arising under Paragraph 10.3. If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Owner, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Project Manager, (4) failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner's suspension, or (7) other reasonable grounds, claim shall be filed in accordance with the procedure established herein. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order or Construction Change Directive. Such claims shall be subject to Paragraph 8.3.

4.3.8 Claims for additional time. If the Contractor wishes to make claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one claim is necessary. Such claims shall be subject to Paragraph 8.3

4.3.9 Injury or damage to person or property. Subject to the Parties' obligations and responsibilities under the Contract Documents in general and Article 11 hereof in particular, if either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding ten (10) days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a claim for additional cost or time related to this claim is to be asserted, it shall be filed as provided in paragraphs 4.3.7 OR 4.3.8.

4.4 RESOLUTION OF CLAIMS AND DISPUTES

4.4.1 The Project Manager will review all claims by the Contractor and take one or more of the following preliminary actions within ten days of receipt of a claim: (1) request additional supporting data from the Contractor, (2) submit a schedule to the Contractor indicating when the Owner expects to take action, (3) reject the claim in whole or in part, stating reasons for rejection, (4) recommend approval of the claim by the Owner, or (5) suggest a compromise. The Owner may also, but is not obligated to, notify the surety, if any, of the nature and amount of the claim.

4.4.2 If a claim has been resolved, the Project Manager will prepare or obtain appropriate documentation.

4.4.3 If a claim has not been resolved, the Contractor shall within ten (10) days after the Project Manager's preliminary response, take one or more of the following actions: (1) submit additional supporting data requested by the Project Manager, (2) modify the initial claim, or (3) notify the Project Manager that the initial claim stands.

4.4.4 If a claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Project Manager, the Project Manager will notify the Contractor in writing that the Project Manager's decision will be made within seven (7) days, which decision shall be considered advisory only and not binding in the event of litigation in respect of the claim. Upon expiration of such time period, the Project Manager will render to the parties the Owner's written decision relative to the claim, including any change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

ARTICLE 5

SUBCONTRACTORS

5.1 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

5.1.1 Unless otherwise required by the Contract Documents or the Bidding Documents, the Contractor, as soon as practicable after the award of the Construction Contract, shall furnish to the Project Manager in writing the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Project Manager will promptly reply to the Contractor in writing stating whether or not the Owner has reasonable objection to any such proposed person or entity.

5.1.2 The Contractor shall not contract with any such proposed person or entity to whom the Owner has made reasonable and timely objection under the provisions of paragraph 5.2.1. The Contractor shall not be required to contract with anyone to whom he has a reasonable objection.

5.1.3 If the Owner has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Owner has no reasonable objection, and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate change order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting names as required by paragraph 5.1.1.

5.1.4 The Contractor shall make no substitution for any subcontractor, person or entity previously selected if the Owner makes reasonable objection to such substitution.

5.2 SUBCONTRACTUAL RELATIONS

5.2.1 By an appropriate written agreement, the Contractor shall require each subcontractor, to the extent of the Work to be performed by the subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Each subcontract agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Where appropriate, the Contractor shall require each subcontractor to enter into similar agreements with his sub-subcontractors. The Contractor shall make

available to each proposed subcontractor, prior to the execution of the subcontract, copies of the Contract Documents to which the subcontractor will be bound by this paragraph 5.3, and, upon written request of the subcontractor, identify to the subcontractor any terms and conditions of the proposed subcontract which may be at variance with the Contract Documents. Each subcontractor shall similarly make copies of such documents available to his sub-subcontractors.

5.3 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

5.3.1 Contractor hereby assigns to Owner (and Owner's assigns) all its interest in any subcontract agreements and purchase orders now existing or hereinafter entered into by Contractor for performance of any part of the Work, which assignment will be effective upon acceptance by Owner in writing and only as to those subcontract agreements and purchase orders that Owner designates in writing. It is agreed and understood that Owner may accept said assignment at any time during the course of construction prior to Final Completion. Upon such acceptance by Owner, (1) Contractor shall promptly furnish to Owner true and correct copies of the designated subcontract agreements and purchase orders, and (2) Owner shall be required to compensate the designated subcontractors or suppliers only for compensation accruing to such parties for work done or materials delivered from and after the date on which Owner determines to accept the subcontract agreements or purchase orders. All sums due and owing by Contractor to the designated subcontractors or suppliers for Work performed or material supplied prior to Owner's acceptance of the subcontract agreements or purchase orders shall constitute a debt between such parties and Contractor. It is further agreed that all subcontract agreements and purchase orders shall provide that they are freely assignable by Contractor to Owner and Owner's assigns under the terms and conditions stated hereinabove. It is further agreed and understood that such assignment is part of the consideration to Owner for entering into the Construction Contract with Contractor and may not be withdrawn prior to Final Completion. Contractor shall deliver or cause to be delivered to Owner a written acknowledgment in form and substance satisfactory to Owner from each of its subcontractors and suppliers of the contingent assignment described herein no later than ten (10) days after the date of execution of each subcontract agreement and purchase order with such parties.

ARTICLE 6

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

6.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar conditions of the Construction Contract. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, he shall make such claim as provided elsewhere in the Contract Documents.

6.1.2 When separate contracts are awarded for different portions of the Project or other work on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Construction Contract.

6.1.3 The Owner will provide for the coordination of the work of his own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when

directed to do so. The Contractor shall make any revisions to its construction schedule as requested by the Owner. If the Contractor claims additional cost or time or both because of any such revisions, the Contractor shall make such claim as provided elsewhere in the Contract Documents. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

6.2 MUTUAL RESPONSIBILITY

6.2.1 The Contractor shall afford the Owner and separate contractors access to the site and all areas of the Work as may be reasonably necessary for the performance of their work, reasonable opportunity for the introduction and storage of their materials and equipment and for the execution of their work, and shall connect and coordinate his Work with theirs as required by the Contract Documents.

6.2.2 If any part of the Contractor's Work depends for proper execution or results upon the work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Project Manager any apparent discrepancies or defects in such other work that render it unsuitable for proper execution and results of Contractor's Work or render it incompatible with Contractor's Work. Failure of the Contractor so to report shall constitute an acceptance of the Owner's or separate contractor's work as fit and proper to receive his Work, except as to defects not then reasonably discoverable.

6.2.3 Subject to Paragraph 8.3 hereof, any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

6.2.4 Should the Contractor cause damage to the work or property of the Owner, or to other completed or partially completed construction or property on the site or to property of any adjoining owner or other party, the Contractor shall promptly remedy such damage as provided in paragraph 10.2.4.

6.2.5 Should the Contractor cause damage to the work or property of any separate contractor, or in the event of any other claim, dispute, or matter in question between the Contractor and any separate contractor, the Contractor shall promptly attempt to settle with such other contractor by agreement, or otherwise to resolve the dispute. In any event, the Contractor shall indemnify, defend, and hold harmless the Owner, its officers, employees, and agents, to the full extent as agreed to under paragraph 3.18.

6.3 OWNER'S RIGHT TO CLEAN UP

6.3.1 If a dispute arises between the Contractor, separate contractors, and the Owner as to their responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in paragraph 3.15, the Owner may clean up and allocate the cost thereof among the contractors responsible therefor.

ARTICLE 7

CHANGES IN THE WORK

7.1 CHANGES

7.1.1 Changes in the Work may be accomplished after execution of the Construction Contract, and without invalidating the Construction Contract, only by Change Order, Construction Change Directive, or Order for a Minor Change in the Work, subject to the limitations stated in this Article 7 and elsewhere in

the Contract Documents.

7.1.2 A Change Order shall be based upon agreement between the Owner and the Contractor; a Construction Change Directive may or may not be agreed to by the Contractor; an Order for a Minor Change in the Work may be issued by the Project Manager alone.

7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive, or Order for a Minor Change in the Work.

7.1.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order or Construction Change Directive that application of such unit prices to the quantities of Work proposed will cause substantial inequity to the Owner or the Contractor, the applicable unit prices shall be equitably adjusted; provided however, that Owner may increase the number of units without change in the unit price if reasonable.

7.2 CHANGE ORDERS

7.2.1 A Change Order is a written order to the Contractor, signed by the Contractor and the Owner stating their agreement upon all of the following:

- .1 a change in the Work;
- .2 the amount of the adjustment in the Contract Sum, if any; and
- .3 the extent of the adjustment in the Contract Time, if any.

The Contract Sum and the Contract Time may be changed only by Change Order.

7.2.2 Methods used in determining adjustments to the Contract Sum may include those listed in paragraph 7.3.3.

7.3 CONSTRUCTION CHANGE DIRECTIVES

7.3.1 A Construction Change Directive is a written order directed to the Contractor and signed by the Owner, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Construction Contract, order changes in the Work within the general scope of the Construction Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

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

7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 by unit prices stated in the Contract Documents or subsequently agreed upon;

- .3 by cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 by the method provided in paragraph 7.3.6.

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

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

7.3.6 If the Contractor does not respond promptly to the Construction Change Directive or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Owner on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, a percentage fee for overhead and profit not to exceed five percent (5%) of such Work's actual cost for Contractor and ten percent (10%) of such Work's actual cost to be apportioned between any and all subcontractors and sub-subcontractors. For Work performed by Contractor's own forces, Contractor's mark-up shall be limited to actual cost plus a percentage fee for overhead and profit not to exceed ten percent (10%). In such case, and also under Clause 7.3.3.3, the Contractor shall keep and present, in such form as the Project Manager may prescribe, an itemized accounting of actual costs together with appropriate supporting data. For the purposes of this paragraph 7.3.6, actual costs shall be defined as and limited to the following:

- .1 costs of labor, including Social Security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
- .2 costs of materials, supplies, and equipment, including costs of transportation, whether incorporated or consumed;
- .3 reasonable rental costs of machinery and equipment, exclusive of hand tools, obtained and used specifically for such Work, whether rented from the Contractor or others; and
- .4 costs of premiums for all bonds (if any), permit fees, and sales, use or similar taxes directly attributable to such Work. Actual cost does not include any item which could be deemed to be a general conditions cost or overhead, such as but not limited to, the cost of Contractor and Subcontractor supervisory personnel assigned to the Work, and field office and related expenses.

7.3.7 Pending final determination of actual cost to the Owner, amounts not in dispute may be included in applications for payment. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Project Manager. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

7.3.8 If the Owner and Contractor do not agree with the adjustment in Contract Time or the method for

determining it, the adjustment or the method shall be determined in accordance with Paragraph 8.3 hereof.

7.3.9 When the adjustments in the Contract Sum and Contract Time are determined as provided herein, such determination shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.

7.4 MINOR CHANGES IN THE WORK

7.4.1 The Project Manager will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order, and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly.

ARTICLE 8

TIME

8.1 DATE OF COMMENCEMENT OF THE WORK

8.1.1 The Date of Commencement of the Work shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.

8.2 PROGRESS AND COMPLETION

8.2.1 All time limits stated in the Contract Documents are of the essence of the Construction Contract. By executing the Construction Contract, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

8.2.2 The Contractor shall begin the Work on the Date of Commencement of the Work. The Contractor shall not, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor. The Date of Commencement of the Work shall not be changed by the effective date of such insurance.

8.2.3 The Contractor shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 If the Contractor is delayed, disrupted, or otherwise interfered with at any time, or from time to time, in the performance of the Work, the rights and obligations of the parties with respect to such delay shall be as set forth in this subsection 8.3. Contractor's exclusive remedy for any delay, disruption, or interference shall be as set forth in this subsection 8.3.

8.3.1.1 Any delay within the control of the Contractor or within the control of any subcontractor, agent or supplier thereof (including, without limitation, delay within the joint control of the Contractor or one or more of his subcontractors, agents or suppliers) shall be the sole responsibility of the Contractor, and the Contractor shall not be entitled to any extension of time or to any increase in the Contract Sum as the result of any such delay.

8.3.1.2 Upon the occurrence of any delay which will affect the date of Substantial Completion caused by fire, flood, unusually severe weather or other act of God, or by court order, unforeseen, concealed, or differing condition related to the Work or other factors beyond the reasonable control of any party hereto or his agents, employees or subcontractors, then the period of performance specified herein shall be extended by Change Order or Construction Change Directive, on a day-for-day basis, but such extension shall not result in any increase in the Contract Sum, and provided that Contractor complies with subsection 8.3.1.4 below.

8.3.1.3 Upon the occurrence of any delay which will affect the date of Substantial Completion not concurrent with delays described under subsections 8.3.1.1 and 8.3.1.2 above, which is proximately caused by acts or omissions within the control of the Owner, his agents or employees, the period of performance specified herein shall be extended by Change Order or Construction Change Directive on a day-for-day basis and the Contractor shall be entitled to reimbursement of actual, proven costs reasonably and necessarily incurred as a direct consequence of such delay, but not in excess of the amount above the Contract Sum for each day of such delay as specified in the Contract Documents.

8.3.1.4 Any claim for an extension of time under subsections 8.3.1.2, and 8.3.1.3 above, and any claim for additional compensation authorized by subsection 8.3.1.3 above, shall be made as follows:

- .1 The Contractor shall, within five (5) days after the onset of any delay, notify the Project Manager in writing of the causes of delay, the facts relating thereto, and the requested time extension. In the case of a continuing delay, only one claim is necessary. Proof of any recoverable delay costs shall be submitted within fifteen (15) days after the end of any period of delay.
- .2 The Project Manager shall determine whether the cause for the claim for an extension of time is beyond the control of the Contractor pursuant to subsections 8.3.1.1, 8.3.1.2, AND 8.3.1.3 above. Owner shall either approve or disapprove the extension requested or claim made.
- .3 Should a time extension or delay cost claim be granted by the Owner, a Change Order or other notice, signed by the Owner, shall be issued to indicate the new date for completion, and/or the adjustment to the Contract Sum.
- .4 Failure by Contractor to timely provide, in writing, a request for time extension, claim for delay costs, or proof of such costs, shall constitute a waiver by Contractor of any time extension or reimbursement of delay costs which Contractor may have otherwise been granted pursuant to this subsection 8.3.
- .5 Nothing herein shall prevent Contractor from requesting, and Owner granting, an extension of time contingent upon payment by Contractor of an agreed amount of liquidated damages in consideration of the time extension.

8.3.2 Contractor expressly acknowledges and confirms his obligation to minimize the cost impact of any delay, delay charges being an unproductive expenditure of public funds. Therefore Contractor shall, to the best of his ability, re-assign personnel and equipment, commence or accelerate unaffected portions of the Work, and otherwise employ all prudent measures available to minimize delay costs. In no event shall the Owner be liable for payment of delay costs which could have been avoided or mitigated by any means reasonably available to the Contractor.

ARTICLE 9

PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contractor will not be allowed any claims for anticipated profits, for loss of profits, or for any damages or additional costs incurred because of a difference between the estimate of any item and the amount of the item actually required, or for the elimination of any part of the Work. Funds for construction of the Work herein contemplated are limited. The Owner reserves the right to eliminate or reduce the items of the proposal or any of the Work as may be required to bring the cost of the Work within the limits of available funds.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Project Manager a schedule of values allocated to the various portions of the Work, which in the aggregate equals the total Contract Sum, divided so as to facilitate payments to subcontractors, supported by such evidence of correctness as the Project Manager may direct. This Schedule, when approved by the Project Manager, shall be used to monitor the progress of the Work and as a basis for Certificates for Payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 At least ten days before the date for each progress payment established in the Construction Contract, the Contractor shall submit to the Project Manager an itemized Application for Payment for operations completed in accordance with the Schedule of Values. Such application shall be supported by such data substantiating the Contractor's right to payment as the Project Manager may require, and reflecting retainage, if any, as provided elsewhere in the Contract Documents.

9.3.1.1 Such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives but not yet included in Change Orders.

9.3.1.2 Such applications may not include requests for payment of amounts the Contractor does not intend to pay to a subcontractor or supplier because of a dispute or other reason.

9.3.2 Unless otherwise provided in the Contract Documents, payments will be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site and, if approved in advance by the Owner, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing for subsequent incorporation in the Work. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance and transportation to the site for those materials and equipment stored off the site.

9.3.3 The Contractor warrants that title to all work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed

by the Contractor or such other person.

9.3.4 When application for payment includes materials stored off the project site or stored on the project site but not incorporated in the Work, for which no previous payment has been requested, a complete description of such material shall be attached to the application. Suitable storage which is off the project site shall be a bonded warehouse or appropriate storage approved by Owner with the stored materials properly tagged and identifiable for this project and properly segregated from other materials. The Owner's written approval shall be obtained before the use of offsite storage is made. Such approval may be withheld in Owner's sole discretion.

9.4 CERTIFICATES FOR PAYMENT

9.4.1 The Project Manager will, within seven (7) days after the receipt of the Contractor's Application for Payment, either issue a Certificate for Payment to the Contractor, for such amount as the Project Manager determines is properly due, or notify the Contractor in writing his reasons for withholding a certificate in whole or in part as provided in paragraph 9.5.1.

9.4.2 No Certificate for Payment shall be issued unless it appears to the Project Manager that the Work has progressed to the point indicated; that, to the best of the Project Manager's knowledge, information and belief, but without in any way waiving any of Owner's rights or claims under the Contract Documents, the quality of the Work is in accordance with the Contract Documents and that all certificates required under the Contract Documents have been furnished in proper form. However, the issuance of a Certificate for Payment will not be a representation that the Project Manager has made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

9.5.1 The Project Manager may decline to certify payment and may withhold his certificate in whole or in part, to the extent reasonably necessary to protect the Owner, if in his opinion he is unable to make the determinations as provided in paragraph 9.4.2. If the Project Manager is unable to make such determinations as provided in paragraph 9.4.2 and to certify payment in the amount of the application, he will notify the Contractor as provided in paragraph 9.4.1. If the Contractor and the Project Manager cannot agree on a revised amount, the Project Manager will promptly issue a Certificate for Payment for the amount for which he is able to make such determinations. The Project Manager may also decline to certify payment or, because of subsequently discovered evidence or subsequent observations, he may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in his opinion to protect the Owner from loss because of:

- .1 defective Work not remedied,
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims;
- .3 failure of the Contractor to make payments properly to subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or another contractor;

- .6 reasonable evidence that the Work will not be completed within the Contract Time, or that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- .7 failure to carry out the Work in accordance with the Contract Documents; or
- .8 failure to maintain accurate and up-to-date as-built drawings.

9.5.2 When the above grounds are removed, Certificates for Payment shall be made by the Project Manager for amounts withheld because of them.

9.6 PROGRESS PAYMENTS

9.6.1 After the Project Manager has issued a Certificate for Payment, the Owner shall make payment in a timely manner not to exceed thirty (30) days from the time the Project Manager issued the Certificate for Payment. The Owner may refuse to make payment on any Certificate for Payment for any default of the Construction Contract, including, but not limited to those defaults set forth in Clauses 9.5.1.1 through 9.5.1.8. The Owner shall not be deemed in default by reason of withholding payment while any of such defaults remain uncured.

9.6.2 The Contractor shall promptly pay each subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such subcontractor's Work, the amount to which said subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such subcontractor's Work. The Contractor shall, by an appropriate agreement with each subcontractor, require each subcontractor to make payments to his sub-subcontractors in similar manner.

9.6.3 The Project Manager may, on request and at his discretion, furnish to any subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Project Manager on account of Work done by such subcontractor.

9.6.4 The Owner shall not have any obligation to pay or to see the payment of any monies to any subcontractor except as may otherwise be required by law.

9.6.5 Payment to suppliers shall be treated in a manner similar to that provided in paragraphs 9.6.2, 9.6.3, and 9.6.4.

9.6.6 No certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

9.6.7 RETAINAGE

9.6.7.1 In addition to any amounts withheld from payment pursuant to any other provision in this Construction Contract, and if the Contractor is satisfactorily performing the Construction Contract, Owner shall retain from progress payments, until payment is due under the terms and conditions governing final payments, amounts as follows:

- .1 Owner shall retain ten percent (10%) of each progress payment until the Work is at least fifty percent (50%) complete.

- .2 After the Work is fifty percent (50%) complete, the Owner may, at its sole discretion, reduce retainage to five percent (5%) of each progress payment. A retainage of five percent (5%) of any progress payment shall not limit the Owner's discretion to retain ten percent (10%) of any subsequent progress payment.

9.6.7.2 In no event shall the amount retained pursuant to paragraph 9.6.7 be reduced to less than five percent (5%) of the Contract Sum until after final acceptance of the project by the Owner.

9.7 FAILURE OF PAYMENT

9.7.1 If the Project Manager does not issue a Certificate for Payment, through no fault of the Contractor, within seven (7) days after receipt of the Contractor's Application for Payment, or if the Owner does not, for reasons other than a default of the Construction Contract, including, but not limited to those defaults set forth in Clauses 9.5.1.1 through 9.5.1.8, pay the Contractor within thirty (30) days after the date established in the Contract Documents any amount certified by the Project Manager, then the Contractor may, upon seven (7) additional days' written notice to the Owner, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, which shall be effected by appropriate Change Order.

9.8 SUBSTANTIAL COMPLETION

9.8.1 The Work will not be considered suitable for Substantial Completion review until all project systems included in the Work are operational as designed and scheduled, all designated or required governmental inspections and certifications have been made and posted, designated instruction of Owner's personnel in the operation of systems has been completed, and all final finishes within the Construction Contract are in place. In general, the only remaining Work shall be minor in nature, so that the Owner could occupy the building or utilize the improvements on that date and the completion of the Work by the Contractor would not materially interfere or hamper the Owner's normal operations. As a further condition of Substantial Completion acceptance, the Contractor shall certify that all remaining Work will be completed within thirty (30) consecutive calendar days or as agreed upon following the date of Substantial Completion.

9.8.2 When the Contractor considers that the Work, or a designated portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Project Manager a list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Upon receipt of the Contractor's list, the Project Manager will make an inspection to determine whether the Work or designated portion thereof is Substantially Complete. If the Project Manager's inspection discloses any item, whether or not included on the Contractor's list, which is not in accordance with the requirements of the Contract Documents, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such items upon notification by the Project Manager. The Contractor shall then submit a request for another inspection by the Project Manager to determine Substantial Completion. When the Work or designated portion thereof is Substantially Complete, the Project Manager will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein, which time shall be no longer than thirty (30) days after the scheduled completion date. The Certificate of Substantial Completion shall be submitted to the

Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

9.8.3 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Project Manager, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.

9.9 PARTIAL OCCUPANCY OR USE

9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage of construction regardless of whether the Contract Time has expired (hereinafter sometimes referred to as "partial occupancy"). Such partial occupancy may commence whether or not the applicable portion of the Work is Substantially Complete.

9.9.2 In the event of partial occupancy, the Contractor shall promptly secure endorsement from its insurance carriers and consent from its sureties, if any.

9.9.3 In the event of partial occupancy before Substantial Completion as provided above, the Contractor shall cooperate with the Owner in making available for the Owner's use and benefit such building services as heating, ventilating, cooling, water, lighting, telephone, elevators, and security for the portion or portions to be occupied, and if the Work required to furnish such services is not entirely completed at the time the Owner desires to occupy the aforesaid portion or portions, the Contractor shall make every reasonable effort to complete such Work or make temporary provisions for such Work as soon as possible so that the aforementioned building services may be put into operation and use. Similar provisions shall be made where the improvements or structures are not buildings so that the Owner may use or occupy such portions of the structure or improvement.

9.9.4 In the event of partial occupancy prior to Substantial Completion, mutually acceptable arrangements shall be made between the Owner and Contractor in respect of the operation and cost of necessary security, maintenance and utilities, including heating, ventilating, cooling, water, lighting, telephone services, and elevators. The Owner shall assume proportionate and reasonable responsibility for the cost of the above services, reduced by any savings to Contractor for such services realized by reason of partial occupancy. Further, mutually acceptable arrangements shall be made between the Owner and Contractor in respect of insurance and damage to the Work. Contractor's acceptance of arrangements proposed by Owner in respect of such matters shall not be unreasonably withheld, delayed, or conditioned. Similar provisions shall be made where the improvements or structures are not buildings so that the Owner may use or occupy such portions of the structure or improvement.

9.9.5 In each instance, when the Owner elects to exercise its right of partial occupancy as described herein, Owner will give Contractor advance written notice of its election to take the portion or portions involved, and immediately prior to partial occupancy, Contractor, and the Project Manager shall jointly inspect the area to be occupied or portion of the Work to be used to determine and record the conditions of the same.

9.9.6 It shall be understood, however, that partial occupancy shall not: (1) constitute final acceptance of any Work, (2) relieve the Contractor for responsibility for loss or damage because of or arising out of defects in, or malfunctioning of, any Work, material, or equipment, nor from any other unfulfilled obligations or responsibilities under the Contract Documents, or (3) commence any warranty period under the Contract Documents; provided that Contractor shall not be liable for ordinary wear and tear resulting from such partial occupancy.

9.9.7 Subject to the terms and conditions provided herein, if the Contractor claims that delay or additional cost is involved because of partial occupancy by the Owner, Contractor shall make such claim as provided elsewhere in the Contract Documents

9.10 FINAL COMPLETION AND FINAL PAYMENT

9.10.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final application for payment, the Project Manager will promptly make such inspection and, when he finds the Work acceptable under the Contract Documents and the Construction Contract fully performed, he will promptly issue a final Certificate for Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable. The Project Manager's final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in paragraph 9.10.2 have been fulfilled. Final Payment is also subject to all Town Charter and Town Code requirements. Warranties required by the Contract Documents shall commence on the date that the Project Manager issues a final Certificate of Payment to the Owner.

9.10.2 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Project Manager:

9.10.2.1 Evidence of compliance with all requirements of the Contract Documents: notices, certificates, affidavits, other requirements to complete obligations under the Contract Documents, including but not limited to (a) instruction of Owner's representatives in the operation of mechanical, electrical, plumbing and other systems, (b) delivery of keys to Owner with keying schedules, sub-master and special keys, (c) delivery to Owner of Contractor's general warranty as described in Paragraph 3.5, and each written warranty and assignment thereof prepared in duplicate, certificates of inspections, and bonds for Project Manager's review and delivery to Owner, (d) delivery to Project Manager of printed or typewritten operating, servicing, maintenance and cleaning instructions for the Work; parts lists and special tools for mechanical and electrical work;

9.10.2.2 If required by the Owner, (a) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible have been paid or otherwise satisfied, (b) consent of surety, if any, to final payment, and (c) other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Construction Contract, to the extent and in such form as may be designated by the Owner, and (d) a final waiver of liens in a form satisfactory to Owner, covering all Work including that of all subcontractors, vendors, labor, materials and services, executed by an authorized officer and duly notarized;

9.10.2.3 In addition to the foregoing, all other submissions required by other articles and paragraphs of the specifications including final construction schedule shall be submitted to the Project Manager before approval of Final Payment;

9.10.2.4 If any Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

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

9.10.4 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

- .1 unsettled liens,
- .2 faulty or defective Work appearing after Substantial Completion,
- .3 failure of the Work to comply with the requirements of the Contract Documents,
- .4 terms of any special warranties required by the Contract Documents, or
- .5 replacement of material or equipment which is rejected if found, after the date of final payment, to be defective, or inferior in quality or uniformity, to the material or equipment specified, or is not as represented to the Project Manager and Owner.

9.10.5 The acceptance of final payment by the Contractor, a subcontractor, or supplier shall constitute a waiver of all claims by that payee.

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.

10.1.2 Unless otherwise provided in the Contract Documents, in the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) which has not been rendered harmless, the Contractor shall immediately stop work in the area affected and report the condition to the Owner in writing. The Work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor, if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB) or when it has been rendered harmless, upon written direction of Owner.

10.1.3 Unless otherwise provided in the Contract Documents, the Contractor shall not be required pursuant to Article 7 to perform without consent any Work relating to asbestos or polychlorinated biphenyl (PCB).

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury or loss to:

- .1 all persons involved in or affected by the Work;
- .2 all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his subcontractors or sub-subcontractors; and
- .3 other property at the site or adjacent thereto, including but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures, private property, and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property for their protection from damage, injury or loss, including but not limited to the Occupational Safety and Health Act (OSHA), as applicable.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

10.2.4 The Contractor shall promptly remedy all damage or loss at its sole cost and expense (other than damage or loss insured under Paragraph 11.3) to any property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, any subcontractor, any sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Clauses 10.2.1.2 and 10.2.1.3, except damage or loss attributable to the acts or omissions of the Owner or anyone directly or indirectly employed by the Owner, or by anyone for whose acts the Owner may be liable, and not attributable to the fault or negligence of the Contractor. Utility locate services provided in the field by the Owner shall not be deemed an act or omission that relieves Contractor of its responsibility hereunder. The foregoing obligations of the Contractor are in addition to his obligations under Paragraph 3.5.

10.2.5 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner.

10.2.6 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

10.3 EMERGENCIES

10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency Work shall be determined as provided in Paragraph 4.3, Paragraph 8.3 and Article 7.

10.4 USE OF EXPLOSIVES, DRIVING OR REMOVAL OF PILES, WRECKING, EXCAVATION WORK OR OTHER SIMILAR AND POTENTIALLY DANGEROUS WORK.

10.4.1 When the use of explosives, driving or removal of piles, wrecking, excavation work or other similarly potentially dangerous work is necessary for the prosecution of the Work, the Contractor shall exercise the utmost care so as not to endanger life or property and shall carry on such activities under the supervision of properly qualified personnel. The Contractor shall be fully responsible for, and shall save and hold Owner harmless from, any and all damages, claims, and for the defense of any actions against the Owner resulting from the prosecution of such Work in connection with or arising out of the Construction Contract.

10.4.2 The Contractor shall notify each public utility company or other owner of property having structures or improvements in proximity to the site of the Work, of his intent to perform potentially dangerous work. Such notice shall be given sufficiently in advance to enable the companies or other owners of property to take such steps as they may deem necessary to protect their property from injury. Such notice shall not relieve the Contractor of responsibility for any damages, claims, or the defense of any actions against the Owner resulting from the performance of such Work in connection with or arising out of the Construction Contract.

10.4.3 All explosives shall be stored in a secure manner and all storage places shall be marked clearly "EXPLOSIVES - KEEP OFF" and shall be in the care of competent watchmen at all times.

10.5 UNDERGROUND UTILITIES

10.5.1 Known Underground Utilities and other underground structures are shown on the Drawings only to the extent such information has been made available to or discovered by the Owner. It is expected that there may be discrepancies and omissions in the location and quantities of actual Underground Utilities and other underground structures and those shown. This information is shown for the convenience of the Contractor, but is not guaranteed to be either correct or complete, and all responsibility for the accuracy and completeness thereof is expressly disclaimed by Owner. The Contractor shall, ahead of excavation, confirm the location of all Underground Utilities and other underground structures so that they will not be accidentally damaged by the construction operation. Contractor shall be responsible for contacting all utility owners concerning location of all above ground utilities and Underground Utilities before proceeding with the Work. Notwithstanding utility locate services that may be provided in the field by utility owners, Contractor shall verify actual location, and Contractor remains solely responsible for any claims or damage to Underground Utilities or other facilities or structures caused by excavating. Contractor is responsible for, at no additional cost to the owner, potholing all existing Underground Utilities to be crossed or that may otherwise affect their means and methods for constructing the Project prior to beginning any construction on the Project.

ARTICLE 11

INSURANCE REQUIREMENTS

11.1 CONTRACTOR'S INSURANCE

11.1.1 Workers' Compensation Insurance. The Contractors shall carry, at its own expense, valid Workers' Compensation Insurance throughout the entire term of its obligations to the Owner. A copy of the policy or signed certificate of insurance shall be on file with the Owner at all times.

11.1.1.1 The policy shall be appropriately endorsed to give a minimum of thirty (30) days notice of cancellation or intention of non-renewal to the Owner.

11.1.1.2 Limits of liability shall be in conformance with the statutory requirements of the Workers' Compensation Laws of the State of Colorado.

11.1.2 Commercial General Liability Insurance. The Contractor shall carry and maintain, at its own expense, Commercial General Liability Insurance throughout the entire term of its obligations to the Owner. A copy of the policy or a signed certificate of insurance shall be on file with the Owner at all times.

11.1.2.1 The policy shall be appropriately endorsed to give all named parties a minimum of thirty (30) days notice of cancellation or intention to non-renew coverage or any material change or restriction of coverage.

11.1.2.2 Limits of liability shall be a minimum of one million dollars (\$1,000,000) each occurrence; Bodily Injury and Property Damage combined, two million dollars (\$2,000,000) aggregate.

11.1.2.3 The following coverages shall be included in the policy:

- .1 Premises, operations and elevators, including work let or sublet, to cover all claims for bodily injury (including but not limited to death, disease or sickness) and damage or destruction or loss of use of any tangible property.
- .2 Products and completed operations.
- .3 Broad form blanket contractual liability with all exclusions deleted.
- .4 Personal injury liability.
- .5 Explosions, collapse, and underground hazards.
- .6 Broad form property damage endorsement.
- .7 Incidental malpractice.
- .8 Independent contractors.

11.1.2.4 The products and completed operations coverage shall be maintained in effect for a period of six (6) years after the date of final acceptance of the Work.

11.1.3 Comprehensive Automobile Liability Insurance. The Contractor shall carry and maintain, at its own expense, Comprehensive Automobile Liability Insurance. A copy of a certificate of insurance shall be on file with the Owner at all times.

11.1.3.1 The policy shall cover all owned or leased vehicles operated by the insured as well as coverage for all non-owned or hired vehicles used by the insured in the course of his operations.

11.1.3.2 The policy shall be appropriately endorsed to give a minimum of thirty (30) days notice of cancellation or intent to non-renew to Owner.

11.1.3.3 The limits of liability shall be a minimum of one million dollars (\$1,000,000) per occurrence and five hundred thousand dollars (\$500,000) per person.

11.1.4 Umbrella/Excess Liability Insurance. The Contractor shall carry and maintain, at its own expense, an Umbrella (excess) Liability policy throughout the entire term of its obligations to the Owner. A copy of the policy or a signed certificate of insurance shall be on file with the Owner at all times.

11.1.4.1 Policy shall be in excess of all underlying insurance including employer's liability.

11.1.4.2 Policy shall not contain any exclusions for hazards, or contractual hazards.

11.1.4.3 Limits of liability shall be a minimum of three million five hundred thousand dollars (\$3,500,000) in the aggregate.

11.1.5 Owner's Liability Insurance. The Contractor shall carry and maintain, at its own expense, an Owner's Liability policy in the name of the Owner.

11.1.5.1 Limits of liability shall be a minimum of two million dollars (\$2,000,000) in the aggregate.

11.2 ADDITIONAL NAMED INSURED

11.2.1 The Contractor's Automobile, Commercial General, and Umbrella Liability policies shall be endorsed to include the Owner as an additional insured and to otherwise comply with the Contract Documents. The Commercial General Liability additional insured coverage shall include products and completed operations coverage. The Contractor's Automobile, Commercial General, and Umbrella Liability additional insured coverage shall be primary with respect to claims made by the Town.

11.3 BUILDER'S RISK/PROPERTY INSURANCE

11.3.1 The Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. Such insurance shall be in a company or companies against which the Owner has no reasonable objection. This insurance shall include the interests of the Owner, the Contractor, subcontractors and sub-subcontractors in the Work as additional insureds, providing that such insurance is primary with respect to claims made by the additional insureds, and be in the form of "all risk" insurance for physical loss or damage with all exclusions deleted. If not covered under all risk insurance or otherwise provided in the Contract Documents, the Contractor shall effect and maintain similar property insurance on portions of the Work stored off the site or in transit when such portions of the Work are to be included in a Request for Payment under paragraph 9.3.2.

11.3.1.1 The form of policy for this coverage shall be "Completed Value". The coverage under this policy shall include contemplated work and work in progress.

11.3.1.2 If by the terms of this insurance any mandatory deductibles are required, or if the Contractor should elect, with the concurrence of the Owner, to increase the mandatory deductible amounts or purchase this insurance with voluntary deductible amounts, the Contractor shall be responsible for payment of the amount of all deductibles in the event of a paid claim. If separate contractors are added as insureds to be covered by this policy, the separate contractor shall be responsible for payment of appropriate parts of any deductibles in the event claims are paid on their part of the Project.

11.4 GENERAL REQUIREMENTS

11.4.1 The Contractor shall file two certified copies of all policies with the Project Manager before exposure to loss may occur. If the Owner is damaged by the failure of the Contractor to maintain such insurance and to so notify the Owner, then the Contractor shall bear all reasonable costs properly attributable thereto.

11.4.2 All insurance policies and/or certificates of insurance required under the Contract Documents shall be issued subject to the following stipulations by the Insurer:

- .1 Underwriter shall have no right of recovery or subrogation against the Owner, it being the intent of the parties that the insurance policy so effected shall protect both parties and be primary coverage for any and all losses covered by the described insurance.
- .2 The clause entitled "Other Insurance Provisions" contained in any policy including the Owner as an additional insured shall not apply to the Owner.
- .3 The insurance companies issuing the policy or policies shall have no recourse against the Owner for payment of any premiums due or for any assessments under any form of any policy.
- .4 Any and all deductibles contained in any insurance policy shall be assumed by and shall be the sole liability of the Contractor.

11.4.3 Additional coverages or higher limits of liability may be required by the Owner should the scope or nature of the work change during the course of the Construction Contract. All liability insurance and builder's risk/property insurance policies required by this Article shall specifically provide that all coverage limits shall be exclusive of costs of defense, including attorneys' fees.

11.4.4 The Contractor shall be solely responsible for ensuring that all subcontractors obtain and maintain in force for the term of this Construction Contract insurance policies sufficient to meet the minimum coverages required under the Contract Documents.

11.4.5 Nothing contained in this Article 11 shall be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his operations under the Construction Contract. Contractor agrees that he alone shall be completely responsible for procuring and maintaining full insurance coverage to adequately insure against the risk attendant to the performance of this Construction Contract. Any approvals of Contractor's insurance coverages by the Owner or the Project Manager shall not operate to the contrary.

11.4.6 The risk of loss to any property to be provided by Contractor to Owner pursuant to this Construction Contract shall be upon the Contractor until said property has been finally accepted by Owner.

11.4.7 Nothing in this Article 11 shall be deemed or construed as a waiver of any of the protections to which Owner may be entitled under the Constitution of the State of Colorado or pursuant to the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, *et seq.*, as amended.

11.4.8 The Contractor shall provide the certificates of insurance required under the Contract Documents before commencing any Work. **It shall be an affirmative obligation of Contractor to provide written notice to the Owner within two (2) days of the cancellation of or substantive change to any of the**

policies required herein and failure to do so shall constitute a breach of the Contract.

11.4.9 All insurance required under the Contract Documents shall be obtained from financially responsible insurance companies, licensed in the State of Colorado and approved by the Owner and shall be maintained until the Contractor's Work is accepted by the Owner. The Contractor shall provide the certificates of insurance required under the Contract Documents before commencing any Work. The Owner may, in writing, specifically indicate its approval or disapproval of each separate policy provided pursuant to the Contract Documents.

11.4.10 All policies under the Contract Documents that are scheduled to expire prior to the time the Contractor's Work is finally accepted by the Owner shall be renewed prior to the scheduled expiration date and evidence of such renewal shall be submitted to the Owner for approval.

11.4.11 If any of the policies required under the Contract Documents shall be or at any time become unsatisfactory to the Owner as to form or substance, or if a company issuing any such policy shall be or at any time become unsatisfactory to the Owner, Owner shall so advise Contractor who shall promptly obtain a new policy, submit the same to the Town for approval, and thereafter submit a certificate of insurance as hereinabove provided.

11.4.12 All liability insurance and builder's risk/property insurance policies required by this Article shall be occurrence-based policies.

ARTICLE 12

UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 If any portion of the Work should be covered contrary to the request of the Project Manager or Owner or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Project Manager, be uncovered for his observation and shall be replaced at the Contractor's expense without change in the Contract Time or Contract Sum.

12.1.2 If any other portion of the Work has been covered which the Owner or Project Manager has not specifically requested to observe prior to being covered, the Project Manager or Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by the Owner or a separate contractor, in which event the Owner shall be responsible for the payment of such costs.

12.2 CORRECTION OF WORK

12.2.1 The Contractor shall promptly correct all Work rejected by the Project Manager as incomplete, defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including additional testing and inspections and compensation for any additional services made necessary thereby.

12.2.2 In addition to the Contractor's obligations under Paragraph 3.5, if, within one year after Final

Completion of the Work or designated portion thereof or within one year after acceptance by the Owner of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This period of one year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation shall survive acceptance of the Work and termination of the Construction Contract. The Owner shall give such notice promptly after discovery of the condition by the Owner.

12.2.3 The Contractor shall remove from the site all portions of the Work which are defective or non-conforming and which have not been corrected or accepted by the Owner.

12.2.4 If the Contractor fails to correct defective or nonconforming Work within a reasonable time, the Owner may correct it in accordance with Paragraph 2.3.

12.2.5 If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the Project Manager, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten (10) days thereafter, the Owner may upon ten (10) additional days' written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for any additional services made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

12.2.6 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused, in whole or in part, by the Contractor's correction or removal of Work which is defective or not in accordance with the requirements of the Contract Documents.

12.2.7 Nothing contained in this Paragraph 12.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 3.5 hereof, or under law or in equity. The establishment of the time period of one year after the Date of Final Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

12.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

12.3.1. If the Owner prefers to accept defective or nonconforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13

MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

13.1.1 The Construction Contract shall be governed by the law of the State of Colorado. Those provisions of law applicable but discretionary because of the Owner's status as a home-rule municipality shall be binding at the Owner's election.

13.2 SUCCESSORS AND ASSIGNS

13.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Construction Contract shall assign, sublet, or transfer (by operation of law or otherwise) any interest in the Construction Contract without the prior written consent of the other. The Contractor shall not assign the whole or any part of the Construction Contract or any monies due or to become due thereunder without the prior written consent of the Owner and of the surety on the Contractor's bond. Any assignment without such written consent shall be void. A copy of such consent of surety, together with a copy of the assignment, shall be filed with the Project Manager. In case the Contractor assigns all or part of any monies due or to become due under the Construction Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims and liens of all persons, firms and corporations for services rendered; for the payment of all laborers and mechanics for labor performed; for the payment of all materials and equipment used or furnished and for payment of all materials and equipment used or rented in the performance of the Work called for in the Construction Contract; and for the payment of any liens, claims, or amounts due the Federal, State or local governments or any of their funds. This restriction on assignment includes, without limitation, assignment of the Contractor's right to payment to its surety or lender.

13.3 WRITTEN NOTICE

13.3.1 All notices to be given hereunder shall be in writing, and may be given, served, or made by depositing the same in the United States mail addressed to the party to be notified, postpaid and registered or certified with return receipt requested, or by delivering the same in person. Notice deposited in the mail in accordance with the provisions hereof shall be effective unless otherwise stated in the Construction Contract from and after the fourth day next following the date deposited in the mail, or when actually received, whichever is earlier. Notice given in any other manner shall be effective only if and when received by the party to be notified. All notices to be given shall be sent to or made at the last business address known to the party giving notice.

13.4 CLAIMS FOR DAMAGES

13.4.1 Should either party to the Construction Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage. All claims by Contractor against Owner that are within the scope of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, *et seq.*, shall be subject to, and brought in accordance with, the provisions of said Act.

13.5 PERFORMANCE AND PAYMENT BOND

13.5.1 The Contractor will be required, simultaneously with the execution of the Construction Contract, to furnish separate Performance and Payment Bonds, each in an amount equal to one hundred percent (100%) of the Contract Sum. Said bonds shall be issued by a responsible surety approved by the Owner and shall guarantee the faithful performance of the Construction Contract and the terms and conditions herein contained and the maintenance of the proposed improvements in good repair according to the terms contained in the Construction Contract. Accompanying the bond form shall be a "Power of Attorney" authorizing the attorney in fact to bind the surety company and certified to include the date of the bond. Such bonds shall be on forms provided by the Owner.

13.5.2 The Contractor shall deliver said bonds to the Project Manager no later than the date of execution of the Construction Contract. If the Contractor fails or neglects to deliver the bonds, as specified, he shall be considered to have abandoned the Construction Contract and his bid security will be forfeited.

13.6 RIGHTS AND REMEDIES

13.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. Such rights and remedies shall survive the acceptance of the Work or any termination of the Contract Documents.

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

13.6.3 In all actions by the Owner to enforce its rights and remedies hereunder, whether at law or equity, the Owner, in addition to all other remedies, shall be entitled to recovery of its reasonable attorneys fees and costs.

13.6.4 The Contractor agrees that the economic loss rule as set forth in the *Town of Alma v. Azco Construction, Inc.*, 10 P.3d 1256 (Colo. 2000), shall not serve as a limitation on the Owner's right to pursue tort remedies in addition to other remedies it may have against the Contractor. Such rights and remedies shall survive the acceptance of the Work or any termination of the Contract Documents. Contractor further specifically waives all the provisions of Chapter 8 of Article 20 of Title 13, Colorado Revised Statutes, regarding defects in the Work under the Construction Contract.

13.7 TESTS AND INSPECTIONS

13.7.1 Tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority. The Contractor shall give the Project Manager and the Owner timely notice of its readiness so the Project Manager and the Owner may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals.

13.7.2 If the Project Manager or public authority having jurisdiction determines that any Work requires additional or special inspection, testing, or approval which paragraph 13.7.1 does not include, the Project Manager may instruct the Contractor to order such additional or special inspection, testing or approval,

and the Contractor shall give notice as provided in paragraph 13.7.1. If such additional or special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, or if the necessity of any such testing, inspection, or approval procedures arises out of the fault, neglect, or omission of Contractor, the Contractor shall bear all costs of such testing, inspection, and approval procedures, including compensation for any additional services made necessary by such failure; otherwise the Owner shall bear such costs, and an appropriate Change Order shall be issued.

13.7.3 Required certificates of inspection, testing or approval, unless otherwise required by Contract Documents, shall be secured by the Contractor and promptly delivered by him to the Project Manager.

13.7.4 If the Project Manager is to observe the inspections, tests or approvals required by the Contract Documents, he will do so promptly and, where practicable, at the normal place of testing.

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

13.8 LITIGATION AND WORK PROGRESS

13.8.1 Unless otherwise agreed in writing, the Contractor shall carry on the Work and maintain its progress during any litigation proceedings, and the Owner shall continue to make payments to the Contractor in accordance with the Contract Documents.

13.9 EQUAL EMPLOYMENT OPPORTUNITY

13.9.1 In connection with the execution of this Construction Contract, the Contractor shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, age, sex, handicap, or national origin, if otherwise qualified. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising, lay-off or termination, rates of pay or other forms of compensation; and selection for training including apprenticeship. Contractor represents that it will require a similar affirmation of nondiscrimination in all contracts it enters into with subcontractors as part of the execution of this Construction Contract.

13.10 COMMERCIAL DRIVER'S LICENSE SUBSTANCE SCREENING

13.10.1 The contractor shall provide written assurance to the Town that each driver that provides services requiring a commercial driver's license pursuant to this Construction Contract participates in an alcohol and controlled substances testing program that meets the requirements of the Federal Motor Carrier Safety Regulations found at 49 C.F.R. Part 382.

ARTICLE 14

TERMINATION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

14.1.1 The Contractor may terminate the Construction Contract if the Work is stopped for a continuous period of sixty (60) days through no act or fault of the Contractor or a subcontractor, sub-subcontractor, or their agents or employees, or any other persons performing portions of the Work under contract with the Contractor, for any of the following reasons:

- .1 issuance of an order of a court or other public authority having jurisdiction;
- .2 an act of government, such as a declaration of national emergency, making material unavailable;
- .3 because the Project Manager has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in paragraph 9.4.1, or because the Owner has not made payment on a Certificate for Payment (without cause) within the time stated in the Contract Documents; or
- .4 if repeated suspensions, delays, or interruptions by the Owner as described in paragraph 14.3 constitute in the aggregate more than 100 percent (100%) of the total number of days scheduled for completion, or one hundred twenty (120) days in any three hundred sixty-five (365) day period, whichever is less.

14.1.2 If one of the above reasons exists, the Contractor may, upon fourteen (14) days' written notice to the Owner, terminate the Construction Contract, unless this reason is cured prior to the expiration of the notice period. Contractor may recover from the Owner payment for Work properly executed in accordance with Contract Documents (the basis for such payment shall be as provided in the Construction Contract) and payment for costs directly related to work thereafter performed by Contractor in terminating such work, including reasonable demobilization and cancellation charges. The Owner shall not be responsible for damages for loss of anticipated profits on work not performed on account of any termination described in paragraphs 14.1.1 and 14.1.2.

14.2 TERMINATION BY THE OWNER FOR CAUSE

14.2.1 The Owner may terminate the Construction Contract if the Contractor:

- .1 refuses or fails to supply, in a timely manner, enough properly skilled workers or proper materials or equipment;
- .2 fails to make payment to subcontractors or suppliers for materials, equipment, or labor in accordance with the respective agreements between the Contractor and the subcontractors or suppliers;
- .3 disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction;
- .4 disregards the instructions of Owner when such instructions are based on the requirements of the Contract Documents;
- .5 is adjudged a bankrupt or insolvent, or makes a general assignment for the benefit of Contractor's creditors, or a trustee or receiver is appointed for Contractor or for any of its property, or files a petition to take advantage of any debtor's act, or to reorganize under bankruptcy or similar law; or
- .6 otherwise does not fully comply with the Contract Documents.

14.2.2 When any of the above reasons exist, the Owner may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and Contractor's surety, if any, seven (7) days' written notice, (except in cases of emergency as reasonably determined by Owner), terminate the services of the Contractor and may:

- .1 take possession of the site and project and of all materials, equipment, tools, and construction equipment and machinery thereon owned, rented, or leased by the

Contractor; and

.2 finish the Work by whatever method the Owner may deem expedient.

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

14.2.4 To the extent the costs of completing the Work, including compensation for additional professional services and expenses, exceed those costs which would have been payable to Contractor to complete the Work except for Contractor's default, Contractor will pay the difference to Owner, and this obligation for payment shall survive termination of the Construction Contract.

14.2.5 In addition to Owner's right to remove Contractor from any part of the Work pursuant to the Contract Documents, Owner may, at any time, at will and without cause, terminate any part of the Work or any subcontract or all remaining Work for any reason whatsoever by giving written notice to Contractor specifying the part of the Work or subcontract to be terminated and the effective date of termination. Contractor shall continue to prosecute the part of the Work not terminated, if any. For the remainder of the Work, the Contract Documents shall remain in full force and effect.

14.2.6 In the event of termination pursuant to paragraph 14.2.5, Owner shall pay as the sole amount due to Contractor in connection with the Construction Contract, (i) sums due for Work properly executed in accordance with Contract Documents to date, including allowable profit and overhead (except retainage sums shall not be paid prior to one hundred twenty (120) days following the date of termination); (ii) reasonable cost of demobilization and cancellation charges; and as additional and special consideration for this provision; (iii) a profit for underperformed work equal to one-half percent (0.5%) of the cost of the Work actually performed to date.

14.2.7 Upon a determination by a court of competent jurisdiction that the termination of Contractor pursuant to paragraph 14.2.1 was wrongful, such termination will be deemed converted to a termination for convenience pursuant to paragraph 14.2.5 and Contractor's remedy for wrongful termination shall be limited to the recovery of the payments permitted for termination for convenience as set forth in paragraph 14.2.6.

14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

14.3.1 In addition to Owner's right to suspend, delay, or interrupt Contractor from any part of the Work pursuant to the Contract Documents, Owner may, at any time, at will and without cause, suspend, delay, or interrupt any part of the Work or any subcontract or all Work for any reason whatsoever for such period of time as the Owner may determine by giving written notice to Contractor specifying the part of the Work or subcontract to be suspended, delayed, or interrupted and the effective date of such suspension, delay, or interruption. Contractor shall continue to prosecute the part of the Work not suspended, delayed, or interrupted and shall properly protect and secure the part of the Work so suspended, delayed, or interrupted. If any part of the Work or subcontract is so suspended, delayed, or interrupted, Contractor shall be entitled to payment of reasonable standby fees (or at Owner's option, payment for demobilization and subsequent remobilization) and of costs directly associated with protecting and securing the affected Work. No payment shall be made by Owner, however, to the extent that such Work or subcontract is, was, or could have been suspended, delayed, or interrupted under the Contract Documents or an equitable adjustment is made or denied under another provision of the Construction Contract. In case of such suspension, delay, or interruption, Owner will issue a Construction Change Directive or authorize a Change Order making any required adjustment to the date of Substantial Completion or the Contract Sum. For the remainder of the Work, the Contract Documents

shall remain in full force and effect.

14.3.2 The rights and remedies of Owner under this Section shall be non-exclusive, and shall be in addition to all the other remedies available to Owner at law or in equity.

Rev. 3/2014

EXHIBIT D TO REQUEST FOR BIDS
FORM OF PERFORMANCE AND PAYMENT BONDS
(TO BE COMPLETED UPON AWARD)

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A312

BOND NO. 64040

Performance Bond

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

CONTRACTOR (Name and Address):

**Puchek Construction, Inc. dba
Professional Contractors, Inc.
125 N. Main St., Suite B
Gunnison, CO 81230**

SURETY (Name and Principal Place of Business):

**American Southern Insurance Company
Northridge Center 1
365 Northridge Rd., Suite 400
Atlanta, GA 30350**

OWNER (Name and Address):

**Town of Crested Butte
507 Maroon Ave.
PO BOX 39
Crested Butte, CO 81224**

CONSTRUCTION CONTRACT

Date: **08/20/15**

Amount: \$ **230,887.00**

Description (Name and Location): **2015 Crested Butte Vehicle Storage Building
Crested Butte, CO**

BOND

Date (Not earlier than Construction Contract Date): **08/27/15**

Amount: \$ **230,887.00**

Modifications to this Bond:

None

See Page 3

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Puchek Construction, Inc. dba

SURETY

Company: (Corporate Seal)

American Southern Insurance Company

Signature: 

Name and Title:

Signature: 

Name and Title: **Stefan E. Tauger
ATTORNEY IN-FACT**

(Any additional signatures appear on page 3)

(FOR INFORMATION ONLY - Name, Address and Telephone:

AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or
other party):

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

2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3 If there is no Owner Default, the Surety's obligation under this bond shall arise after:

3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract, Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

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

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

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

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

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

.1 After investigation, determine the amount for

which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or

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

5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default of this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation or costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

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

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

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

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of



BOND NO. 64040

Payment Bond

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

CONTRACTOR (Name and Address):
**Puchek Construction, Inc. dba
Professional Contractors, Inc.
125 N. Main St., Suite B
Gunnison, CO 81230**

SURETY (Name and Principal Place of Business):
**American Southern Insurance Company
Northridge Center 1
365 Northridge Rd., Suite 400
Atlanta, GA 30350**

OWNER (Name and Address):
**Town of Crested Butte
507 Maroon Ave.
PO BOX 39
Crested Butte, CO 81224**

CONSTRUCTION CONTRACT

Date: **08/20/15**

Amount: **\$ 230,887.00**

Description (Name and Location):

**2015 Crested Butte Vehicle Storage Building
Crested Butte, CO**

BOND Date (Not earlier than Construction Contract Date): **08/27/15**

Amount: **\$ 230,887.00**

Modifications to this Bond:

None

See Page 6

CONTRACTOR AS PRINCIPAL

Company: _____ (Corporate Seal)
Puchek Construction, Inc. dba

SURETY

Company: _____ (Corporate Seal)
American Southern Insurance Company

Signature: *Paul Farni*
Name and Title: **Owner/CEO**

Signature: *[Signature]*
Name and Title: **Stefan E. Tauger
ATTORNEY-IN-FACT**

(Any additional signatures appear on page 6)

(FOR INFORMATION ONLY - Name, Address and Telephone)
AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer
or other party):

1 The Contractor and the Surety, jointly and severally bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2 With respect to the Owner, this obligation shall be null and void if the Contractor:

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

2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4 The Surety shall have no obligation to Claimants under this Bond until:

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

4.2 Claimants who do not have a direct contract with the Contractor:

.1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

.2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

.3 Not having been paid within the above 30 days, have sent a written notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5 If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6 When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

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

6.2 Pay or arrange for payment of any undisputed amounts.

7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

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

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

11 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

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

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

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

15 DEFINITIONS

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

required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

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

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

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

**** Notwithstanding any language to the contrary in this bond, the related contract documents or referenced statues, increases in the contract amount and/or any increases in the penal sum, herein, shall be limited to 15% of the initial contract price, both singly and in the aggregate without the express written consent of surety. And, any refusal by surety to provide such consent shall not be considered as a default by surety or principal in the bonds or the contract.**

**** Surety's liability under this bond is limited as it pertains to any express or implied warranty provisions to which Principal is obligated, by contract and/or statute, to a period of one year after subject work is performed.**

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company: _____ (Corporate Seal)

SURETY
Company: _____ (Corporate Seal)

Signature: _____
Name and Title:
Address:

Signature: _____
Name and Title:
Address:

AMERICAN SOUTHERN INSURANCE COMPANY

Home Office: 3715 Northside Parkway, NW
Suite 4-800
Atlanta, Georgia 30327

Mailing Address: P. O. Box 723030
Atlanta, GA 31139-0030

GENERAL POWER OF ATTORNEY

Know all men by these Presents, that the American Southern Insurance Company had made, constituted and appointed, and by these presents does make, constitute and appoint Stefan E. Tauger of Parker, Colorado; Brian A. O'Neal of Parker, Colorado; Scott E. Stoltzner of Hoover, Alabama; Arthur S. Johnson of Atlanta, Georgia; Andrew C. Heaner of Atlanta, Georgia; Richard L. Shanahan of Atlanta, Georgia; Jeffery L. Booth of Parma, Ohio; James E. Feldner of West Lake, Ohio; Patricia E. Martin of Lutz, Florida; David R. Brett of Columbia, South Carolina; Melanie J. Stokes of Atlanta, Georgia; Jason S. Centrella of Jacksonville, Florida; Brian Clark of Matthews, North Carolina; Michael K. Thompson of Atlanta, Georgia; Kelley E.M. Nys of Decatur, Georgia; or Diane L. McLain of Fitchburg, Wisconsin, EACH as its true and lawful attorney for it and its name, place and stead to execute on behalf of the said company, as surety, bonds, undertakings and contracts of suretyship to be given to all obligees provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount of the sum of \$1,000,000 (one million dollars), including but not limited to consents of surety for the release of retained percentages and/or final estimates on construction contracts or similar authority requested by the Department of Transportation, State of Florida; and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of the presents, shall be as binding upon the Company as if they had been duly signed by the President and attested by the Secretary of the Company in their own proper persons.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted pursuant to due authorization by the Executive Committee of the Board of Directors of the American Southern Insurance Company on the 26th day of May, 1998:

RESOLVED, that the Chairman, President or any Vice President of the Company be, and that each or any of them hereby is, authorized to execute Powers of Attorney qualifying the attorney named in the given Power of Attorney to execute in behalf of the American Southern Insurance Company bonds, undertakings and all contracts of suretyship; and that any Secretary or any Assistant Secretary be, and that each or any of them hereby is, authorized to attest the execution of any such Power of Attorney, and to attach thereto the seal of the Company.

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company when so affixed and in the future, with respect to any bond undertaking or contract of suretyship to which it is attached.

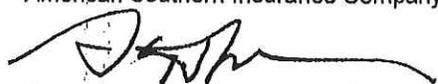
In Witness Whereof, the American Southern Insurance Company has caused its official seal to be hereto affixed, and these presents to be signed by its President and attested by its Secretary, this 6th day of October, 2014.

Attest:


Gail A. Lee, Secretary

American Southern Insurance Company

By:


Scott G. Thompson, President

STATE OF GEORGIA

SS:

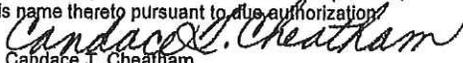
COUNTY OF FULTON

On this 6th day of October, 2014, before me personally came Scott G. Thompson to me known, who being by me duly sworn, did depose and say that he resides in Atlanta, in the County of Fulton, State of Georgia, at 421 Hollydale Court; that he is the President of American Southern Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed and that he signed his name thereto pursuant to the authorization

STATE OF GEORGIA

SS:

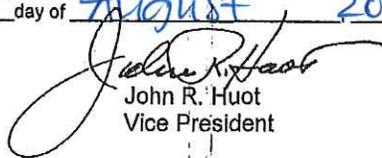
COUNTY OF FULTON


Candace J. Heatham
Notary Public, State of Georgia
Qualified in DeKalb County
Commission Expires December 7, 2017

I, the undersigned, a Vice President of American Southern Insurance Company, a Kansas Corporation, DO HEREBY CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and, furthermore, that the Resolution of the Executive Committee of the Board of Directors set forth in the Power of Attorney is now in force.

Signed and sealed at the City of Atlanta, Dated the 27th day of August, 2015

Power No. **37222**


John R. Huot
Vice President







**GEOTECHNICAL INVESTIGATION
WASTER WATER TREATMENT PLANT
BUTTE AVENUE AND 8TH STREET
CRESTED BUTTE, COLORADO**

Prepared for:

**HDR ENGINEERING, INC.
303 East 17th Street, Suite 700
Denver, Colorado 80203**

Attention: Mr. Brien Gidlow, P.E.

CTL|T Project No. SW01017-125

October 2, 2008



TABLE OF CONTENTS

SCOPE	1
SUMMARY	1
SITE CONDITIONS.....	2
PROPOSED CONSTRUCTION.....	2
SUBSURFACE CONDITIONS.....	3
Ground Water	3
SEISMICITY	3
EXCAVATION	4
CLARIFIER FOUNDATIONS.....	4
BELOW-GRADE WALLS.....	5
BUILDING FOUNDATIONS	6
FLOOR SLABS.....	7
CONCRETE	8
SURFACE DRAINAGE	9
LIMITATIONS.....	9
FIG. 1 – LOCATION OF EXPLORATORY BORING	
FIGS. 2 AND 3 – SUMMARY LOG OF EXPLORATORY BORING	
FIG. 4 – GRADATION TEST RESULTS	



SCOPE

This report presents the results of our Geotechnical Investigation for a proposed secondary clarifier to be constructed at the existing waste water treatment plant in Crested Butte, Colorado. The purpose of our investigation was to explore subsurface conditions at the site and provide geotechnical recommendations for foundation design and construction. The report includes descriptions of subsoil and ground water conditions found in our exploratory boring and laboratory test results. The report also presents our recommended design and construction criteria for foundations, lateral earth pressure on walls, and placement of backfill for below-grade areas. Evaluation of the property for the possible presence of potentially hazardous materials (environmental site assessment) was beyond the scope of this investigation.

This report was prepared from data developed during our field exploration, laboratory testing, engineering analysis, and our experience with similar conditions. The recommendations contained in this report were developed based on our understanding of the planned construction. If plans change significantly, we should be contacted to review or revise our recommendations. A summary of conclusions is presented below, with more detailed descriptions of our findings and recommendations contained in this report.

SUMMARY

1. Subsurface conditions encountered in our exploratory boring consisted of interbedded layers of silty to clayey sands and gravels to the maximum depth explored of 40 feet below the existing ground surface. Ground water was measured in the boring at a depth of 5 feet, at the time of drilling. A sophisticated dewatering system such as well points and sheet piling or other bracing system will likely be needed to accomplish excavation and construction below the water table.
2. In our opinion, the planned building that will house the new clarifier and the connecting structure between the existing and proposed clarifier can be constructed with spread footing foundations underlain by the on-site granular soils and/or densely compacted, granular fill.



3. The proposed clarifier can be founded with a reinforced concrete mat bearing on the natural soils. The design will need to consider the lateral earth pressures acting on the below-grade walls of the clarifier and buoyant forces resulting from the shallow ground water condition.
4. A low risk of movement and damage will exist for slab-on-grade floors constructed within the clarifier building or connecting structure if underlain by the natural sand and gravel soils and/or densely compacted, granular fill. Placement of the floor slabs should be delayed to as late in the construction sequence as possible to reduce the impact of settlement of the underlying backfill soils, as much as possible.
5. Surface grading surrounding the secondary clarifier building should provide for rapid removal of storm runoff.

SITE CONDITIONS

The proposed secondary clarifier site is located within the waste water treatment plant, northeast of the intersection of Butte Avenue and 8th Street in Crested Butte, Colorado. The existing facility layout and general vicinity of the site are shown on Fig. 1. The new clarifier is to be built directly east of the existing clarifier and north of the existing digester. The ground surface at the new clarifier site is comparatively flat and level and devoid of vegetation.

PROPOSED CONSTRUCTION

We understand the proposed secondary clarifier is to be constructed within a one-story, masonry block or pre-engineered metal building. An enclosed connecting structure may be constructed between the existing and proposed clarifier buildings to allow access between the structures without going outside. The areas within the building surrounding the proposed circular clarifier and in the connecting structure will likely have slab-on-grade floors. The new clarifier is to have a footprint similar to the existing clarifier, but will extend to a depth of about 20 feet below the existing ground surface, or about 5 feet lower than the bottom of the existing clarifier.



SUBSURFACE CONDITIONS

Subsurface conditions at the site were investigated by drilling one exploratory boring at the approximate location shown on Fig. 1. The boring was drilled to a depth of 40 feet with a 4-inch diameter, continuous-flight auger and a truck-mounted drill rig. A representative of our firm observed drilling operations, obtained samples, and logged the conditions encountered. A graphical log of the soils found in the boring, field penetration resistance test results, and selected laboratory test data are presented on Figs. 2 and 3. Gradation test results are shown on Fig. 4.

Subsurface conditions encountered in our exploratory boring consisted of interbedded layers of sands and gravels that contained varying amounts of silt and clay. The sand and gravel soils were dense to very dense based on the results of field penetration resistance tests. One sample of very gravelly sand obtained at a depth of 9 feet contained 16 percent silt and clay-size particles (passing the No. 200 sieve). Although we were able to advance the boring to a depth of 40 feet without encountering any refusal conditions, it is possible that larger diameter, cobble and boulder-size materials could be found in the excavation for the proposed clarifier.

Ground Water

At the time of drilling, ground water was encountered at a depth of 5 feet below the existing ground surface. Ground water levels at the site are directly influenced by the water level in the Slate River that parallels the eastern boundary of the waste water treatment plant.

SEISMICITY

This area, like most of west-central Colorado, is subject to a degree of seismic activity. We believe the subsurface conditions on the property classify as Site Class D according to the 2003 International Building Code (IBC).



EXCAVATION

We anticipate an excavation of approximately 20 to 25 feet deep will be required for construction of the proposed secondary clarifier. The near-surface sands and gravels are dense to very dense. We anticipate these granular soils can be excavated with conventional excavation equipment. The possible presence of cobble and boulder-size materials could complicate the excavation process. We believe the sands and gravels classify as Type C materials using the Occupational Safety and Health Administration (OSHA) criteria. OSHA requires temporary construction slopes be no steeper than 1.5:1 (horizontal to vertical) for Type C soils in the absence of active seepage. Flatter slopes, shoring, or bracing will be needed if active seepage occurs, which is likely at this site.

We believe dewatering using local sump pits and pumps will be ineffective where excavations for the proposed structures need to extend more than about 7 feet below the ground surface. Considering the elevation of the ground water and the proximity of the existing adjacent structures at the site, a more sophisticated dewatering system such as well points and sheet piling or other bracing system will likely be needed to accomplish excavation and construction below the water table. If the structure configuration and associated piping will allow, we anticipate the sheet piling or other bracing system can probably be left in-place. Design of the dewatering and excavation bracing systems will be the responsibility of the specialty contractor.

CLARIFIER FOUNDATIONS

Our boring indicates the subsoils at the estimated foundation level for the proposed clarifier consist of dense to very dense sands and gravels. We believe the clarifier can be founded on a reinforced concrete mat underlain by the granular soils found at the bottom of the excavation. We recommend the concrete mat be designed for a maximum allowable soil pressure of 4,000 psf. Soils loosened or disturbed during foundation excavation or the forming process should be removed prior to placing the



mat. The completed excavation should be observed by a representative of our firm to verify the exposed conditions are as expected.

Considering the elevation of the ground water, the clarifier may be subjected to uplift caused by hydrostatic pressure. The clarifier should be designed and constructed as a watertight structure capable of resisting the buoyant force. We recommend a design wet density of 120 pounds per cubic foot (pcf) for backfill used to “weight” the structure. Backfill that is under water will be buoyant, reducing its density by the unit weight of water to about 60 pcf.

BELOW-GRADE WALLS

The below-grade walls of the clarifier will retain about 15 to 20 feet of backfill and will need to be designed to resist lateral earth pressure and hydrostatic pressure. We recommend the walls be backfilled with the on-site, silty to clayey sand and gravel soils that have a maximum diameter of 3 inches. The walls will be fixed and unable to rotate. For level granular backfill, the walls should be designed to resist an “at-rest” lateral earth pressure corresponding to an equivalent fluid weight of at least 55 pcf. This value does not include the anticipated hydrostatic pressure.

We recommend the below-grade wall backfill be placed in thin, loose lifts that have been moisture conditioned to near optimum moisture content and compacted to at least 95 percent of maximum standard Proctor dry density (ASTM D 698). Improvements placed over the backfill should be designed for settlement. We anticipate even properly compacted backfill will settle under its own weight about 1 percent of the backfill thickness. The granular nature of the backfill should allow the settlement to occur fairly rapidly, reducing the impact of the settlement on the surficial improvements. It may be difficult to achieve compaction of the backfill due to equipment constraints around the buried structure. If this situation occurs, the use of hand-operated compaction equipment and thinner, loose lifts are recommended. Placement and compaction of the clarifier backfill should be observed and tested by a representative of our office during construction.



BUILDING FOUNDATIONS

We understand the proposed secondary clarifier will be housed in a masonry block or pre-engineered metal building. A connecting hallway may be constructed between the existing and proposed clarifiers. We believe conventional spread footing foundations underlain by the near-surface, natural gravelly sands and/or densely compacted, granular fill are appropriate for construction of the proposed structures.

We anticipate about 15 to 20 feet of granular backfill will be present adjacent to the walls of the planned secondary clarifier. Depending on the final configuration, the backfill zone could underlie spread footings constructed in association with the proposed surficial structures. As discussed previously, some settlement of the backfill is likely, although the granular backfill materials should settle more rapidly. A pre-engineered metal building will be more flexible and capable of accommodating possible settlement of the footing subgrade soils. If the masonry block building alternative is selected, some delay between completion of the clarifier backfill placement and construction of the building footings may be necessary to reduce the risk of foundation movements affecting the comparatively brittle block structure. The amount of time delay will be dependent on the composition of the backfill soils. More clayey backfill material will require a longer delay.

The following section presents our design and construction recommendations for spread footing foundations.

1. We recommend spread footings be constructed on the near-surface, natural gravelly sand and/or densely compacted granular fill that has been moisture conditioned and compacted as specified in **BELOW-GRADE WALLS**. Materials loosened during the excavation process should be removed from foundation areas prior to the placement of concrete.
2. Spread footings can be designed for a maximum allowable soil pressure of 3,000 psf.
3. We recommend footings beneath continuous foundations walls be at least 16 inches wide. Footings beneath isolated column pads should be



at least 24 inches square. Larger footing sizes may be required due to structural loading.

4. We recommend foundation designs consider total settlement of 1-inch and differential settlement of at least 1/2-inch.
5. Permanent connections between the proposed connecting hallway and the existing secondary clarifier should be flexible and capable of accommodating differential movements.
6. Continuous foundation walls should be reinforced, top and bottom, to span local anomalies in the subsoils. We recommend reinforcement sufficient to simply span an unsupported distance of at least 8 feet.
7. Exterior footings must be protected from frost action per local building codes. We recommend a depth of frost protection in this area of 42 inches.
8. A representative of our firm should observe the completed foundation excavations to confirm exposed conditions are similar to those encountered in our exploratory boring. The placement and compaction of any below-footing fill and footing subgrade preparation should be observed and tested by a representative of our firm during construction.

FLOOR SLABS

We understand the areas within the building surrounding the proposed circular clarifier and in the connecting structure will likely have slab-on-grade floors. A low risk of movement and damage will exist for slab-on-grade floors underlain by the on-site, natural sand and gravel soils and/or densely compacted, granular fill. Placement of the floor slabs should be delayed to as late in the construction sequence as possible to reduce the impact of settlement of the underlying backfill soils, as much as possible.

We recommend slab-on-grade floors be separated from exterior walls and interior bearing members with joints allowing for free vertical movement of the slab. Slip-joints in slab-bearing partitions (if present) should allow at least 1-1/2 inches of free vertical movement. Slabs should be placed directly on the exposed subsoils or properly moisture conditioned, compacted fill. The 2006 International Building Code (IBC) requires a vapor retarder be placed between base course or subgrade soils and the concrete slab-on-grade floor. The merits of installation of a vapor retarder below



floor slabs depend on the sensitivity of floor coverings and building use to moisture. A properly installed vapor retarder (10 mil minimum) is more beneficial below concrete slab-on-grade floors where floor coverings, painted floor surfaces or products stored on the floor will be sensitive to moisture. The vapor retarder is most effective when concrete is placed directly on top of it, rather than placing a sand or gravel leveling course between the vapor retarder and the floor slab. The placement of concrete on the vapor retarder may increase the risk of shrinkage cracking and curling. Use of concrete with reduced shrinkage characteristics including minimized water content, maximized coarse aggregate content, and reasonably low slump will reduce the risk of shrinkage cracking and curling. Considerations and recommendations for the installation of vapor retarders below concrete slabs are outlined in Section 3.2.3 of the 2006 report of the American Concrete Institute (ACI) Committee 302, "Guide for Concrete Floor and Slab Construction (ACI 302.R-96)".

Frequent control joints should be provided in the slabs to reduce the effects of curling and to help control cracking. If underslab plumbing is necessary, service lines should be pressure tested for leaks during construction. Any utility lines that penetrate the slabs should be isolated from the slabs with joints or be constructed with flexible sections to allow for free vertical movement.

CONCRETE

Concrete in contact with soils can be subject to sulfate attack. Our experience suggests the granular soils encountered in the vicinity of the project site typically contain water soluble sulfate contents of less than 0.1 percent. Sulfate concentrations less than 0.1 percent indicate Class 0 exposure to sulfate attack for concrete in contact with the subsoils, according to ACI 201.2R-01 as published in the 2008 ACI Manual of Concrete Practice. For this level of sulfate concentration, the American Concrete Institute (ACI) indicates Type I cement can be used for concrete in contact with the subsoils. In our experience, superficial damage may occur to the exposed surfaces of highly permeable concrete, even though sulfate levels are relatively low. To control this risk and to resist freeze-thaw deterioration, the water-to-cementitious material ratio



should not exceed 0.50 for concrete in contact with soils that are likely to stay moist due to surface drainage or high water tables. Concrete subjected to freeze-thaw cycles should be air entrained.

SURFACE DRAINAGE

The ground surface surrounding the exterior of the proposed building should be sloped to drain away from the structure in all directions. Backfill around the building should be densely compacted to reduce surface water infiltration.

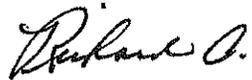
LIMITATIONS

An exploratory boring was drilled at the project site to obtain a general picture of the subsurface conditions. Variations in subsoil conditions not indicated by the boring are always possible. We recommend completed foundation excavations be observed by a representative of our firm to verify the exposed conditions are as anticipated from our boring. Placement and compaction of clarifier wall backfill and grading fill should be observed and tested by a representative of our office during construction.

We believe this investigation was conducted with that level of skill and care normally used by geotechnical engineers practicing in this area at this time. No warranty, express or implied, is made.

If we can be of further service in discussing the contents of this report or in the analyses of the proposed construction from a geotechnical point-of-view, please call.

CTL | THOMPSON, INC.



Richard A. Phillips,
Principal Engineer

RAP:WCH:kis
(4 copies sent)



Reviewed by:



William C. Hoffmann, Jr., P.E.
Senior Principal Engineer

BORING NO.: TH - 1
 PROJECT NAME: CRESTED BUTTE WASTE WATER TREATMENT PLANT
 CTL/JT PROJECT NO.: SW01017-125
 CLIENT: HDR ENGINEERING, INC.
 GROUND ELEVATION: NOT RECORDED
 TOTAL HOLE DEPTH: 40 FEET

DRILLING CONTRACTOR: GDI DRILLING, INC.
 RIG TYPE: DIEDRICH D-50, TRUCK-MOUNTED
 DRILLING METHOD(S): AUGER DRILLING
 DATE(S) DRILLED: SEPTEMBER 10, 2008
 LOGGED BY: SHEA EARLY



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FIELD DATA						LABORATORY DATA					SOIL & ROCK SYMBOL	LEGEND:		
DEPTH, FT	SAMPLE LENGTH, FT	SAMPLE TYPE	RUN TIME (MIN/FT)	SAMPLE RECOVERY (%)	FIELD TEST	MOISTURE CONTENT, %	DRY DENSITY, PCF	SWELL / COMPRESSED, %	LIQUID LIMIT, %	PLASTICITY INDEX, %		MINUS NO. 200 SIEVE, %	∇ WATER LEVEL MEASURED AT 5' AT TIME OF DRILLING.	GEOTECHNICAL DESCRIPTION
5	4.0-5.0	C			N=35/12								SAND, CLAYEY, GRAVELLY, DENSE, VERY MOIST, DARK GRAY. (SC)	
10	8.0-10.0	C			N=35/12	10.8	124				16		SAND, SILTY, VERY GRAVELLY, DENSE, WET, DARK GRAY. (SM)	
15	14.0-15.0	SS			N=39/18								GRAVEL, CLAYEY, SLIGHTLY SANDY, DENSE TO VERY DENSE, WET, DARK GRAY. (GC)	
20	19.0-20.0	SS			N=50/9									
25	24.0-25.0	C			N=26/4									
30	29.0-30.0	SS			N=50/3									
FIELD TEST N = PENETRATION TEST RESISTANCE - BLOWS/INCHES PP = POCKET PENETRATION RESISTANCE - TONS/SQ FT P = RECOVERY IN INCHES FOR SHELBY TUBE PUSHED 12 INCHES RQD = ROCK QUALITY DESIGNATION - %												SAMPLE TYPE AC = Auger Cuttings ST = Shelby Tube C = California Sampler SS = Standard Split Spoon RC = Rock Core		

FIG. 2

BORING NO.: TH - 1
 PROJECT NAME: CRESTED BUTTE WASTE WATER TREATMENT PLANT
 CTL/T PROJECT NO.: SW01017-125
 CLIENT: HDR ENGINEERING, INC.
 GROUND ELEVATION: NOT RECORDED
 TOTAL HOLE DEPTH: 40 FEET

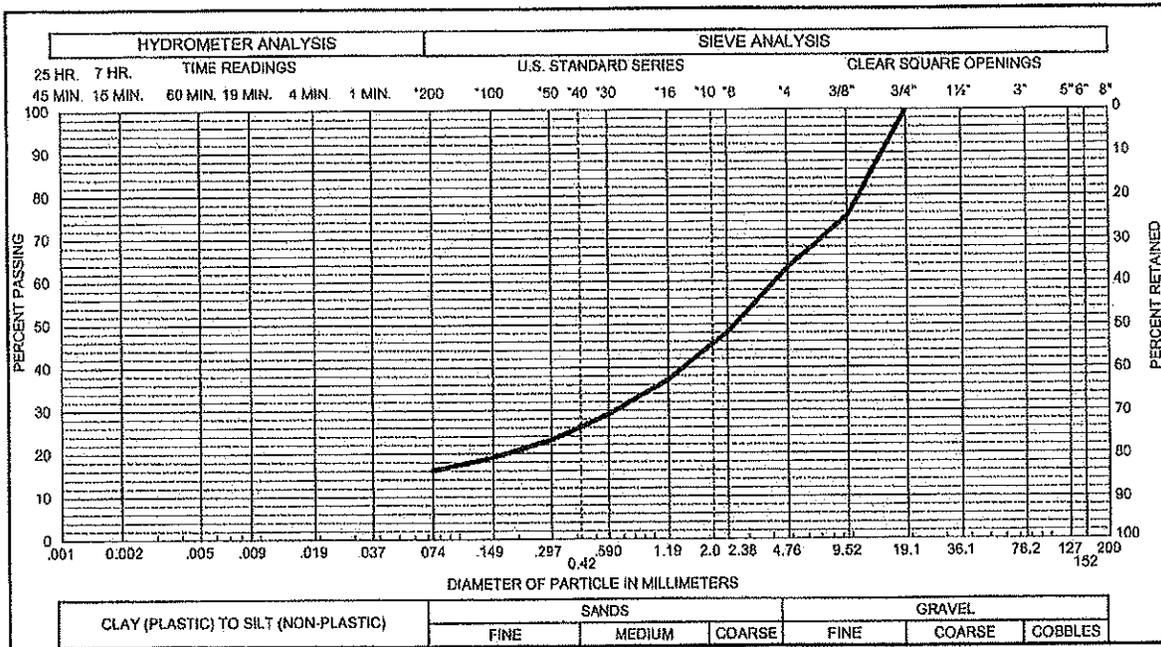
DRILLING CONTRACTOR: GDI DRILLING, INC.
 RIG TYPE: DIEDRICH D-50, TRUCK-MOUNTED
 DRILLING METHOD(S): AUGER DRILLING
 DATE(S) DRILLED: SEPTEMBER 10, 2008
 LOGGED BY: SHEA EARLY



FIELD DATA						LABORATORY DATA						SOIL & ROCK SYMBOL	LEGEND:	
DEPTH, FT	SAMPLE LENGTH, FT	SAMPLE TYPE	RUN TIME (MIN/FT)	SAMPLE RECOVERY (%)	FIELD TEST	MOISTURE CONTENT, %	DRY DENSITY, PCF	SWELL / COMPRESSED, %	LIQUID LIMIT, %	PLASTICITY INDEX, %	MINUS NO. 200 SIEVE, %		GEOTECHNICAL DESCRIPTION	JOINTS / REMARKS
35	34.0-35.0	SS			N=50/4							GRAVEL, CLAYEY, SLIGHTLY SANDY, DENSE TO VERY DENSE, WET, DARK GRAY. (GC)		
	37.0-38.0	SS			N=50/8							GRAVEL, SILTY, SANDY, VERY DENSE, WET, DARK GRAY. (GM)		
40												SAND, SILTY, GRAVELLY, VERY DENSE, WET, DARK GRAY. (SM)		
45														
50														
55														
60														
<p>FIELD TEST N = PENETRATION TEST RESISTANCE - BLOWS/INCHES PP = POCKET PENETRATION RESISTANCE - TONS/SQ FT R = RECOVERY IN INCHES FOR SHELBY TUBE PUSHED 12 INCHES RQD = ROCK QUALITY DESIGNATION - %</p>												<p>SAMPLE TYPE AC = Auger Cuttings ST = Shelby Tube C = California Sampler SS = Standard Split Spoon RC = Rock Core</p>		

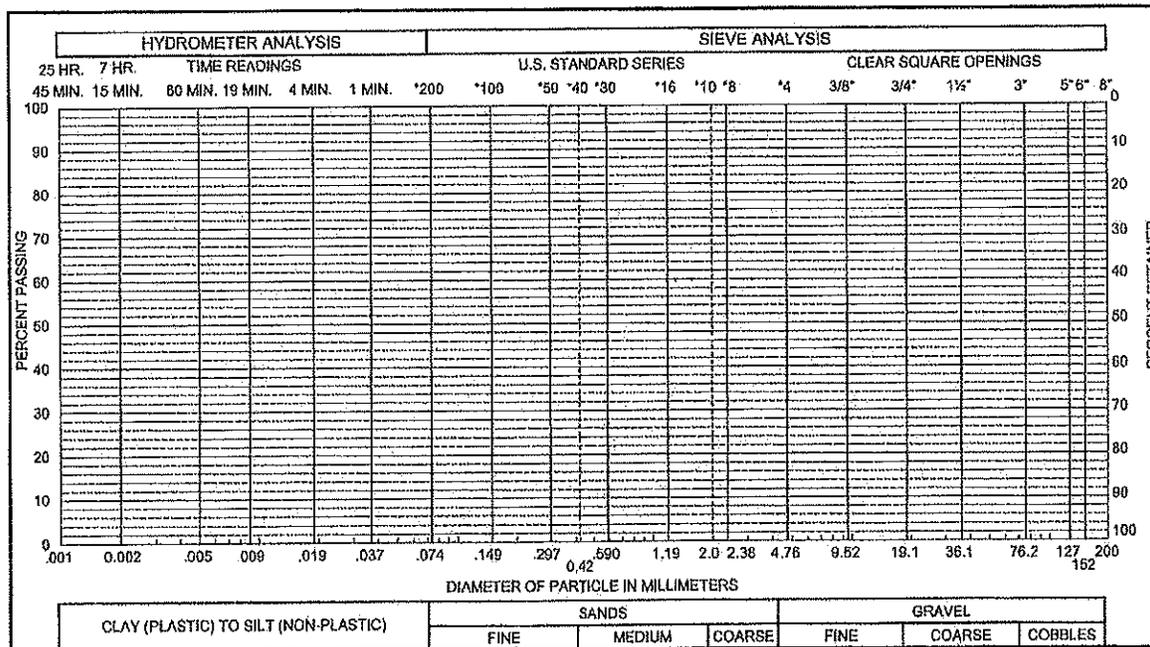
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FIG. 3



Sample of SAND, VERY GRAVELLY, SILTY (SM) From TH - 1 AT 9 FEET

GRAVEL	37 %	SAND	47 %
SILT & CLAY	16 %	LIQUID LIMIT	%
PLASTICITY INDEX			%

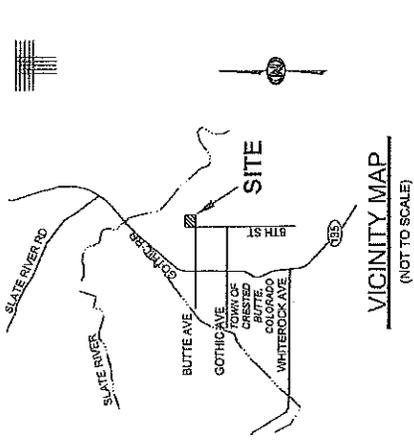
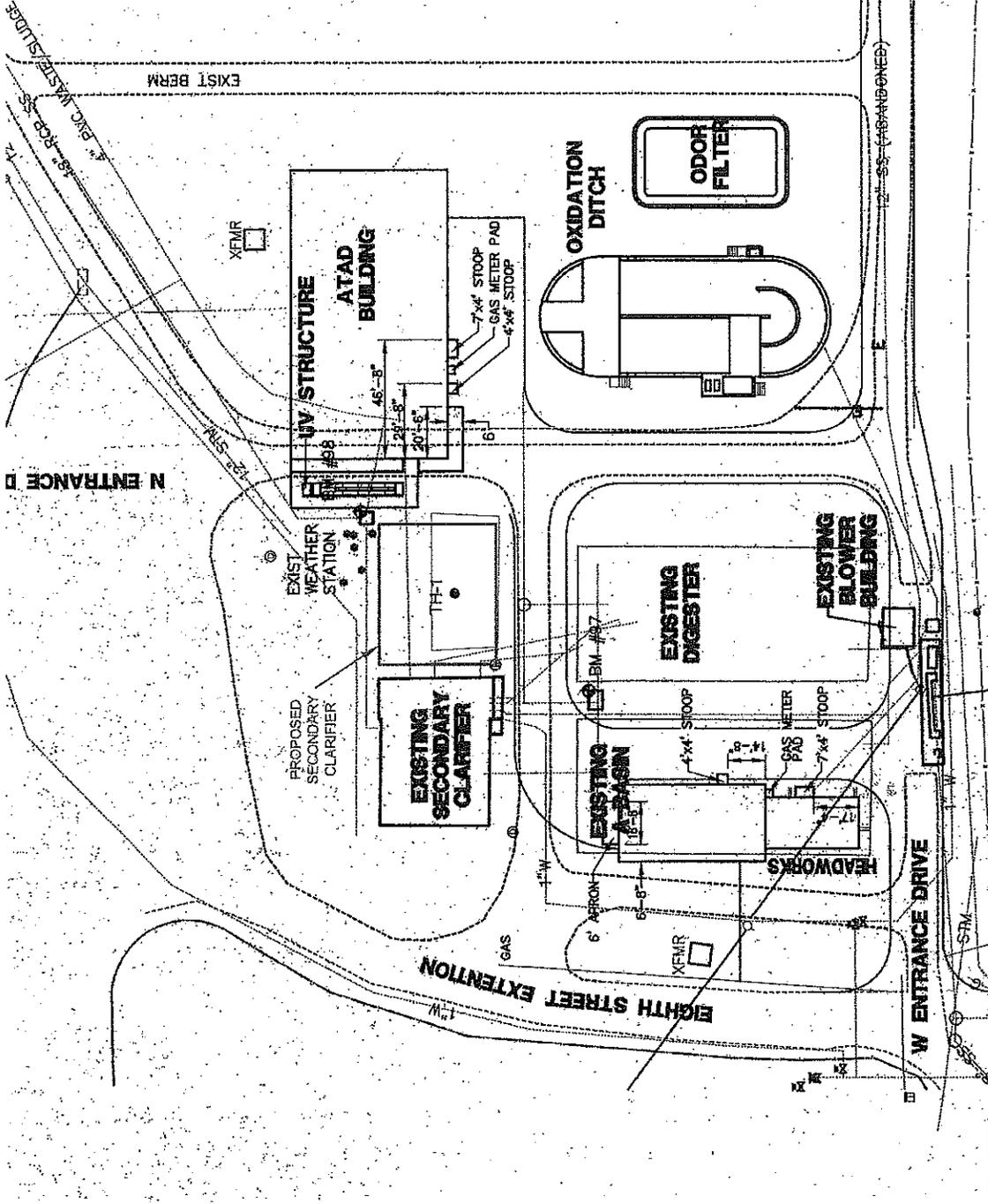


Sample of From

GRAVEL	%	SAND	%
SILT & CLAY	%	LIQUID LIMIT	%
PLASTICITY INDEX			%

Gradation Test Results

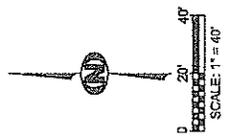
FIG. 4



VICINITY MAP
(NOT TO SCALE)

LEGEND:
 TH-1 ● APPROXIMATE LOCATION OF EXPLORATORY BORING.
 — LOCATION OF PROPOSED BUILDING FOOTPRINT.

NOTE:
 BASE DRAWING WAS PROVIDED BY HDR, INC., RECEIVED SEPTEMBER 29, 2008.



**Location of
 Exploratory
 Boring**