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CITY OF Grand Junction COLORADO

NOTICE OF AWARD

Date: November 13, 2019

Company: FCI Constructors, Inc.

Project: City of Grand Junction Fire Station #6 RFP-4703-19-DH

You have been awarded the City of Grand Junction Fire Station #6 RFP-4703-19-DH for a sum of **Zero Dollars ($0.00) for Pre-Construction/Design Services, and 4% Overhead & Profit (OH&P) for Construction Services portion of the project. The Contractor shall work with the Owner, and Owner's Architect, to determine the not to exceed Guaranteed Maximum Price (GMP) for the project construction.**

Please notify Kirsten Armbruster, City of Grand Junction Project Manager 970-244-1421 for project scheduling and return to the City Purchasing Division an acknowledged copy of this Notice of Award, Signed Contract, and Insurance Certificate.

CITY OF GRAND JUNCTION, COLORADO

DocuSigned by:
Duane Hoff Jr., Senior Buyer – City of Grand Junction
9F789E7D50F24BC...
Duane Hoff Jr., Senior Buyer

SUPPLIER ACKNOWLEDGEMENT

Receipt of this Notice to Award is hereby acknowledged:

Company: FCI Constructors, Inc

By: DocuSigned by:
Shane Haas – FCI Constructors, Inc.
352F3651DD164EB...
Shane Haas - FCI Constructors, Inc.

Title: Executive Vice President

Date: 11/13/2019 | 09:12 MST

CITY OF Grand Junction COLORADO

LETTER OF INTENT

Date: October 28, 2019

Company: FCI Constructors, Inc.

Project: City of Grand Junction Fire Station #6 CM/GC (RFP-4703-19-DH)

Based upon review of the proposals received for City of Grand Junction Fire Station #6 CM/GC (RFP-4703-19-DH), your company has been selected as preferred proposer of this solicitation process. It is the intent of the City of Grand Junction to award the aforementioned contract to your company as is listed in the RFP documents and your proposal response.

This contract must be approved by the City of Grand Junction – City Council prior to award and a contract being issued.

Please feel free to contact me with any questions at 970-244-1545.

Thank you and Best Regards

Duane Hoff Jr., Senior Buyer

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CITY OF GRAND JUNCTION, COLORADO

****

CONTRACT

This CONTRACT made and entered into this 13th day of November, 2019 by and between the **City of Grand Junction, Colorado,** a government entity in the County of Mesa, State of Colorado, hereinafter in the Contract Documents referred to as the "Owner" and **FCI Constructors, Inc.** hereinafter in the Contract Documents referred to as the "Contractor."

WITNESSETH:

WHEREAS, the Owner advertised that sealed Responses would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the Project described by the Contract Documents and known as **City of Grand Junction Fire Station #6 CM/GC RFP-4703-19-DH**.

WHEREAS, the Contract has been awarded to the above named Contractor by the Owner, and said Contractor is now ready, willing and able to perform the Services/Work specified in the Notice of Award, in accordance with the Contract Documents;

NOW, THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual covenants hereinafter set forth and subject to the terms hereinafter stated, it is mutually covenanted and agreed as follows:

ARTICLE 1

Contract Documents: It is agreed by the parties hereto that the following list of instruments, drawings, and documents which are attached hereto, bound herewith, or incorporated herein by reference constitute and shall be referred to either as the "Contract Documents" or the "Contract", and all of said instruments, drawings, and documents taken together as a whole constitute the Contract between the parties hereto, and they are fully a part of this agreement as if they were set out verbatim and in full herein:

The order of contract document governance shall be as follows:

a. The body of this contract agreement
b. Solicitation Documents for the Project; **City of Grand Junction Fire Station #6;**
c. Notice of Award;
d. Contractors Response to the Solicitation
e. Services/Work Change Requests (directing that changed Services/Work be performed);
f. Field Orders
g. Change Orders.

ARTICLE 2

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Definitions: The clauses provided in the Solicitation apply to the terms used in the Contract and all the Contract Documents.

ARTICLE 3

Contract Services/Work: The Contractor agrees to furnish all labor, tools, supplies, equipment, materials, and all that is necessary and required to complete the tasks associated with the Services/Work described, set forth, shown, and included in the Contract Documents as indicated in the Solicitation Document.

ARTICLE 4

Contract Time: Time is of the essence with respect to this Contract. The Contractor hereby agrees to commence Services/Work under the Contract on or before the date specified in the Solicitation from the Owner, and to achieve Substantial Completion and Final Completion of the Services/Work upon developed, proposed and accepted timeline.

ARTICLE 5

Contract Price and Payment Procedures: The Contractor shall accept as compensation for the performance and completion of all of the Services/Work specified in the Contract Documents, the sum of **Zero Dollars ($0.00) for Pre-Construction/Design Services, 4% Overhead & Profit (OH&P) for Construction Services portion of the project, The Contractor shall Work with the Owner, and Owner's Architect, to determine the not to exceed Guaranteed Maximum Price (GMP) for the project construction.** If this Contract contains unit price pay items, the Contract Price shall be adjusted in accordance with the actual quantities of items completed and accepted by the Owner at the unit prices quoted in the Solicitation Response. The amount of the Contract Price is and has heretofore been appropriated by the Grand Junction City Council for the use and benefit of this Project. The Contract Price shall not be modified except by Change Order or other written directive of the Owner. The Owner shall not issue a Change Order or other written directive which requires additional Services/Work to be performed, which Services/Work causes the aggregate amount payable under this Contract to exceed the amount appropriated for this Project, unless and until the Owner provides Contractor written assurance that lawful appropriations to cover the costs of the additional Services/Work have been made.

Unless otherwise provided in the Solicitation, monthly partial payments shall be made as the Services/Work progresses. Applications for partial and Final Payment shall be prepared by the Contractor and approved by the Owner in accordance with the Solicitation.

Upon Final Completion of the Services/Work under the Contract and before the Contractor shall receive final payment, the Owner shall publish at least twice in a newspaper of general circulation published in the County a notice that: 1. the Owner has accepted such Services/Work as completed according to the Contract Documents; 2. the Contractor is entitled to final payment therefore; 3. thirty days after the first publication, specifying the exact date, the Owner shall pay the full balance due under the Contract; and 4. persons having claims for labor, materials, team hire, sustenance, provisions, provender, or other supplies used or consumed by the Contractor or a subcontractor shall file a verified

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statement of the amount due and unpaid on account of such claim prior to the date specified for such payment. Nothing herein shall be construed as relieving the Contractor and the Sureties on the Contractor's Bonds from any claim or claims for Services/Work or labor done or materials or supplies furnished in the execution of the Contract.

ARTICLE 6

Bonds: The Contractor shall furnish currently herewith the Bonds required by the Contract Documents, such Bonds being attached hereto. The Performance Bond shall be in an amount not less than one hundred percent (100%) of the Contract Price set forth in Article 5. The Payment Bond shall be in an amount not less than one hundred (100%) of the Contract Price set forth in Article 5.

ARTICLE 7

Contract Binding: The Owner and the Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contract Documents constitute the entire agreement between the Owner and Contractor and may only be altered, amended or repealed by a duly executed written instrument. Neither the Owner nor the Contractor shall, without the prior written consent of the other, assign or sublet in whole or in part its interest under any of the Contract Documents and specifically, the Contractor shall not assign any moneys due or to become due without the prior written consent of the Owner.

ARTICLE 8

Severability: If any part, portion or provision of the Contract shall be found or declared null, void or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having the authority thereover, only such part, portion or provision shall be effected thereby and all other parts, portions and provisions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, City of Grand Junction, Colorado, has caused this Contract to be subscribed and sealed and attested in its behalf; and the Contractor has signed this Contract the day and the year first mentioned herein. The Contract is executed in two counterparts.

CITY OF GRAND JUNCTION, COLORADO

DocuSigned by:

By: Duane Hoff Jr., Senior Buyer – City of Grand Junction 11/13/2019 | 14:04 MST

9F789E7D50F14BC...

Duane Hoff Jr., Senior Buyer Date

FCI Constructors, Inc.

DocuSigned by:

By: Shane Haas – FCI Constructors, Inc. 11/13/2019 | 09:12 MST

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Shane Haas - FCI Constructors, Inc. Executive Vice President Date

Request for Proposal
RFP-4703-19-DH

City of Grand Junction Fire Station #6
CM/GC

RESPONSES DUE:
October 17, 2019 prior to 3:30 PM MST
Accepting Electronic Responses Only
Responses Only Submitted Through the Rocky Mountain E-Purchasing System (RMEPS)
https://www.rockymountainbidsystem.com/default.asp
(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor MUST contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

PURCHASING REPRESENTATIVE:
Duane Hoff Jr., Senior Buyer
duaneh@gjcity.org
(970) 244-1545

This solicitation has been developed specifically for a Request for Proposal intended to solicit competitive responses for this solicitation, and may not be the same as previous City of Grand Junction solicitations. All offerors are urged to thoroughly review this solicitation prior to submitting. Submittal by **FAX, EMAIL or HARD COPY IS NOT ACCEPTABLE** for this solicitation.

REQUEST FOR PROPOSAL

TABLE OF CONTENTS

Section

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2.0	**General Contract Terms and Conditions**
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4.0	**Scope of Services**
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REQUEST FOR PROPOSAL

SECTION 1.0: ADMINISTRATIVE INFORMATION & CONDITIONS FOR SUBMITTAL

1.1 Issuing Office: This Request for Proposal (RFP) is issued by the City of Grand Junction, on behalf of the Fire Department. All contact regarding this RFP is directed to:

RFP QUESTIONS:
Duane Hoff Jr., Senior Buyer
duaneh@gjcity.orgl

1.2 Purpose: The purpose of this RFP is to obtain proposals from qualified professional Firms, interested in providing CONSTRUCTION MANAGEMENT/GENERAL CONTRACTOR (CM/GC) services for the proposed Fire Station #6 which shall be new construction. The project will be located at 731 27 Road, Grand Junction, CO. The City has selected Chamberlin Architects as the design firm. This proposal includes pre-construction services for work with the City and the Architect during design.

1.3 The Owner: The Owner is the City of Grand Junction, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative.

1.4 Mandatory Pre-Proposal Briefing: A **mandatory** pre-proposal briefing is required by all contractors intending to submit a response to this RFP. Any contractor that does not attend the **mandatory** pre-proposal briefing shall not be eligible to submit a response to this RFP. **The pre-proposal briefing shall be held at City Hall Auditorium, 250 N. 5th Street, Grand Junction, CO on October 2, 2019 at 2:30pm.**

1.5 Compliance: All participating Offerors, by their signature hereunder, shall agree to comply with all conditions, requirements, and instructions of this RFP as stated or implied herein. Should the Owner omit anything from this packet which is necessary to the clear understanding of the requirements, or should it appear that various instructions are in conflict, the Offeror(s) shall secure instructions from the Purchasing Division prior to the date and time of the submittal deadline shown in this RFP.

1.6 Submission: Please refer to section 5.0 for what is to be included. ***Each proposal shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (https://www.rockymountainbidsystem.com/default.asp).*** *This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.)* Please view our "**Electronic Vendor Registration Guide"** at http://www.gjcity.org/business-and-economic-development/bids/ for details. For proper comparison and evaluation, the City requests that proposals be formatted as directed in Section 5.0 "Preparation and Submittal of Proposals." Submittals received that fail to follow this format may be ruled non-responsive. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline. **800-835-4603**).

1.7 Altering Proposals: Any alterations made prior to opening date and time must be initialed by the signer of the proposal, guaranteeing authenticity. Proposals cannot be altered or amended after submission deadline.

1.8 Withdrawal of Proposal: A proposal must be firm and valid for award and may not be withdrawn or canceled by the Offeror for sixty (60) days following the submittal deadline date, and only prior to award. The Offeror so agrees upon submittal of their proposal. After award this statement is not applicable.

1.9 Acceptance of Proposal Content: The contents of the proposal of the successful Offeror shall become contractual obligations if acquisition action ensues. Failure of the successful Offeror to accept these obligations in a contract shall result in cancellation of the award and such vendor shall be removed from future solicitations.

1.10 Addenda: All questions shall be submitted in writing to the appropriate person as shown in Section 1.1. Any interpretations, corrections and changes to this RFP or extensions to the opening/receipt date shall be made by a written Addendum to the RFP by the City Purchasing Division. Sole authority to authorize addenda shall be vested in the City of Grand Junction Purchasing Representative. Addenda will be issued electronically through the Rocky Mountain E-Purchasing website at www.rockymountainbidsystem.com. Offerors shall acknowledge receipt of all addenda in their proposal.

1.11 Exceptions and Substitutions: All proposals meeting the intent of this RFP shall be considered for award. Offerors taking exception to the specifications shall do so at their own risk. The Owner reserves the right to accept or reject any or all substitutions or alternatives. When offering substitutions and/or alternatives, Offeror must state these exceptions in the section pertaining to that area. Exception/substitution, if accepted, must meet or exceed the stated intent and/or specifications. The absence of such a list shall indicate that the Offeror has not taken exceptions, and if awarded a contract, shall hold the Offeror responsible to perform in strict accordance with the specifications or scope of work contained herein.

1.12 Confidential Material: All materials submitted in response to this RFP shall ultimately become public record and shall be subject to inspection after contract award. "**Proprietary or Confidential Information"** is defined as any information that is not generally known to competitors and which provides a competitive advantage. Unrestricted disclosure of proprietary information places it in the public domain. Only submittal information clearly identified with the words "***Confidential Disclosure***" and uploaded as a separate document shall establish a confidential, proprietary relationship. Any material to be treated as confidential or proprietary in nature must include a justification for the request. The request shall be reviewed and either approved or denied by the Owner. If denied, the proposer shall have the opportunity to withdraw its entire proposal, or to remove the confidential or proprietary restrictions. Neither cost nor pricing information nor the total proposal shall be considered confidential or proprietary.

1.13 Response Material Ownership: All proposals become the property of the Owner upon receipt and shall only be returned to the proposer at the Owner's option. Selection or rejection of the proposal shall not affect this right. The Owner shall have the right to use

all ideas or adaptations of the ideas contained in any proposal received in response to this RFP, subject to limitations outlined in the entitled "Confidential Material". Disqualification of a proposal does not eliminate this right.

1.14 Minimal Standards for Responsible Prospective Offerors: A prospective Offeror must affirmably demonstrate their responsibility. A prospective Offeror must meet the following requirements.

- Have adequate financial resources, or the ability to obtain such resources as required.
- Be able to comply with the required or proposed completion schedule.
- Have a satisfactory record of performance.
- Have a satisfactory record of integrity and ethics.
- Be otherwise qualified and eligible to receive an award and enter into a contract with the Owner.

1.15 Open Records: Proposals shall be received and publicly acknowledged at the location, date, and time stated herein. Offerors, their representatives and interested persons may be present. Proposals shall be received and acknowledged only so as to avoid disclosure of process. However, all proposals shall be open for public inspection after the contract is awarded. Trade secrets and confidential information contained in the proposal so identified by offer as such shall be treated as confidential by the Owner to the extent allowable in the Open Records Act.

1.16 Sales Tax: The Owner is, by statute, exempt from the State Sales Tax and Federal Excise Tax; therefore, all fees shall not include taxes.

1.17 Public Opening: Proposals shall be opened in the City Hall Auditorium, 250 North 5th Street, Grand Junction, CO, 81501, immediately following the proposal deadline. Offerors, their representatives and interested persons may be present. Only the names and locations on the proposing firms will be disclosed.

SECTION 2.0: GENERAL CONTRACT TERMS AND CONDITIONS

2.1. Acceptance of RFP Terms: A proposal submitted in response to this RFP shall constitute a binding offer. Acknowledgment of this condition shall be indicated on the Letter of Interest or Cover Letter by the autographic signature of the Offeror or an officer of the Offeror legally authorized to execute contractual obligations. A submission in response to the RFP acknowledges acceptance by the Offeror of all terms and conditions including compensation, as set forth herein. An Offeror shall identify clearly and thoroughly any variations between its proposal and the Owner's RFP requirements. Failure to do so shall be deemed a waiver of any rights to subsequently modify the terms of performance, except as outlined or specified in the RFP.

2.2. Execution, Correlation, Intent, and Interpretations: The Contract Documents shall be signed by the Owner and Contractor. By executing the contract, the Contractor represents that they have familiarized themselves with the local conditions under which the Work is to be performed, and correlated their observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is

required by any one, shall be as binding as if required by all. The intention of the documents is to include all labor, materials, equipment, services and other items necessary for the proper execution and completion of the scope of work as defined in the technical specifications and drawings contained herein. All drawings, specifications and copies furnished by the Owner are, and shall remain, Owner property. They are not to be used on any other project.

2.3. Permits, Fees, & Notices: The Contractor shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of the work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance in any respect, he shall promptly notify the Owner in writing, and any necessary changes shall be adjusted by approximate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he shall assume full responsibility and shall bear all costs attributable.

2.4. The Owner: The Owner is the City of Grand Junction and/or Mesa County, Colorado and is referred to throughout the Contract Documents. The term Owner means the Owner or his authorized representative. The Owner shall, at all times, have access to the work wherever it is in preparation and progress. The Contractor shall provide facilities for such access. The Owner will make periodic visits to the site to familiarize himself generally with the progress and quality of work and to determine, in general, if the work is proceeding in accordance with the contract documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in the contract. The Owner will have authority to reject work which does not conform to the Contract documents. Whenever, in his reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he will have authority to require the Contractor to stop the work or any portion, or to require special inspection or testing of the work, whether or not such work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and sub-Contractor, or any of their agents or employees, or any other persons performing any of the work.

2.5. Contractor: The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or his authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specification and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency or omission he may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies or omissions. The Contractor shall not commence work without clarifying Drawings, Specifications, or Interpretations.

2.6. Sub-Contractors: A sub-contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the contract documents and means a sub-contractor or his authorized representative.

2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work: As soon as practicable after bids are received and prior to the award of the contract, the successful Contractor shall furnish to the Owner, in writing for acceptance, a list of the names of the sub-contractors or other persons or organizations proposed for such portions of the work as may be designated in the proposal requirements, or, if none is so designated, the names of the sub-contractors proposed for the principal portions of the work. Prior to the award of the contract, the Owner shall notify the successful Contractor in writing if, after due investigation, has reasonable objection to any person or organization on such list. If, prior to the award of the contract, the Owner has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful Contractor may, prior to the award, withdraw their proposal without forfeiture of proposal security. If the successful Contractor submits an acceptable substitute with an increase in the proposed price to cover the difference in cost occasioned by the substitution, the Owner may, at their discretion, accept the increased proposal or may disqualify the Contractor. If, after the award, the Owner refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute 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 a name with respect thereto prior to the award.

2.8. Supervision and Construction Procedures: The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract.

2.9. Warranty: The Contractor warrants to the Owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards may be considered defective. If required by Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If within ten (10) days after written notice to the Contractor requesting such repairs or replacement, the Contractor should neglect to make or undertake with due diligence to the same, the City may make such repairs or replacements. All indirect and direct costs of such correction or removal or replacement shall be at the Contractor's expense. The Contractor will also bear the expenses of making good all work of others destroyed or damaged by the correction, removal or replacement of his defective work.

2.10. Responsibility for those Performing the Work: The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all other persons performing any of the work under a contract with the Contractor.

2.11. Use of the Site: The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment.

2.12. Cleanup: The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of work he shall remove all his waste materials and rubbish from and about the project, as well as all his equipment and surplus materials.

2.13. Miscellaneous Conditions: Material Availability: Contractors must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of bid. It is the responsibility of the bidder to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time. OSHA Standards: All bidders agree and warrant that services performed in response to this invitation shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA standards, the Owner may require the services to be redone at no additional expense to the Owner.

2.14. Time: Time is of the essence with respect to the time of completion of the Project and any other milestones or deadline which are part of the Contract. It will be necessary for each Bidder to satisfy the City of its ability to complete the Work within the Contract Time set forth in the Contract Documents. The Contract Time is the period of time allotted in the Contract Documents for completion of the work. The date of commencement of the work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein, or as established as entered on the Bid Form. The Date of Substantial Completion of the work or designated portions thereof is the date certified by the Owner when construction is sufficiently complete, in accordance with the Contract Documents.

2.15. Performance & Payment Bonds: After design & construction documents completion, but prior to construction commencement, Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the contract amount as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These bonds shall remain in effect for the duration of the Warranty Period (as specified in the Special Conditions). Contractor shall also furnish other bonds that may be required by the Special Conditions. All bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds singed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the City.

2.16. Retention: The Owner will deduct money from the partial payments in amounts considered necessary to protect the interest of the Owner and will retain this money until after completion of the entire contract. The amount to be retained from partial payments will be five (5) percent of the value of the completed work, and not greater than

five (5) percent of the amount of the Contract. When the retainage has reached five (5) percent of the amount of the Contract no further retainage will be made and this amount will be retained until such time as final payment is made.

2.17. Liquidated Damages for Failure to Enter Into Contract: Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.

2.18. Liquidated Damages for Failure to Meet Project Completion Schedule: Once a construction schedule is set and agreed upon by both Owner and Contractor, if the Contractor does not achieve Final Completion by the required date, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of **$1,000.00** is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction and the Work, rather than having the benefit of a completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives is written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is substantially complete. In addition to the Work being substantially complete, Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by the City in the inspection for final completion. Unless otherwise stated in the Special Conditions, for purposes of this liquidated damages clause, the Work shall not be finished and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the Contractor's Performance Bond and Payment Bond shall pay such liquidated damages.

In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.
Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Substantial or Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

2.19. Contingency/Force Account: Contingency/Force Account work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this contract. Contingency/Force Account Authorization will be directed by the Owner through an approved form. Contingency/Force Account funds are the property of the Owner and any Contingency/Force Account funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account funds, that are not authorized by Owner or Owner's Project Manager.

2.20. Claims for Additional Cost or Time: If the Contractor wishes to make a claim for an increase in the contract sum or an extension in the contract time, he shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall precede in accordance with the regulations on safety. No such claim shall be valid unless so made. Any change in the contract sum or contract time resulting from such claim shall be authorized by Change Order.

2.21. Field Orders: The Owner may issue written Field Orders which interpret the Contract Documents in accordance with the specifications, or which order minor changes in the work in accordance with the agreement, without change in the contract sum or time. The Contractor shall carry out such Field Orders promptly.

2.22. Progress & Completion: The Contractor shall begin work on the date of commencement as defined in the Contract, and shall carry the work forward expeditiously with adequate forces and shall complete it within the contract time.

2.23. Payment & Completion: The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the work under the Contract Documents. Upon receipt of written notice that the work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when they find the work

acceptable under the Contract Documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Contract Documents. Partial payments will be based upon estimates, prepared by the Contractor, of the value of Work performed and materials placed in accordance with the Contract Documents. The work performed by Contractor shall be in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professional firms in the same or similar type of work in the applicable community. The work and services to be performed by Contractor hereunder shall be done in compliance with applicable laws, ordinances, rules and regulations.

2.24. Protection of Persons & Property: The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing safeguards for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the work, or in consequence of the non-execution thereof by the Contractor, they shall restore, at their own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.

2.25. Changes in the Work: The Owner, without invalidating the contract, may order changes in the work within the general scope of the contract consisting of additions, deletions or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the work shall be authorized by Change Order and shall be executed under the applicable conditions of the contract documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum or the contract time. The contract sum and the contract time may be changed only by Change Order.

2.26. Claims for Additional Cost or Time: If the Contractor wishes to make a claim for an increase in the contract sum or an extension in the contract time, he shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall precede in accordance with the regulations on safety. No such claim shall be valid unless so made. Any change in the contract sum or contract time resulting from such claim shall be authorized by Change Order.

2.27. Minor Changes in the Work: The Owner shall 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.

2.28. Uncovering & Correction of Work: The Contractor shall promptly correct all work rejected by the Owner as defective or as failing to conform to the contract documents whether observed before or after substantial completion and whether or not fabricated

installed or competed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services thereby made necessary. If within one (1) year after the date of completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the contract documents, any of the work 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. The Owner shall give such notice promptly after discovery of condition. All such defective or non-conforming work under the above paragraphs shall be removed from the site where necessary and the work shall be corrected to comply with the contract documents without cost to the Owner. The Contractor shall bear the cost of making good all work of separate Contractors destroyed or damaged by such removal or correction. If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the payment or contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

2.29. Acceptance Not Waiver: The Owner's acceptance or approval of any work furnished hereunder shall not in any way relieve the proposer of their present responsibility to maintain the high quality, integrity and timeliness of his work. The Owner's approval or acceptance of, or payment for, any services shall not be construed as a future waiver of any rights under this Contract, or of any cause of action arising out of performance under this Contract.

2.30. Change Order/Amendment: No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the contract shall be made in writing by the Owner.

2.31. Amendment: No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the contract shall be made in writing by the Owner Purchasing Division.

2.32. Assignment: The Offeror shall not sell, assign, transfer or convey any contract resulting from this RFP, in whole or in part, without the prior written approval from the Owner.

2.33. Compliance with Laws: Proposals must comply with all Federal, State, County and local laws governing or covering this type of service and the fulfillment of all ADA (Americans with Disabilities Act) requirements. Contractor hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good standing, required by law.

2.34. Debarment/Suspension: The Contractor herby certifies that the Contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Governmental department or agency.

2.35. Confidentiality: All information disclosed by the Owner to the Offeror for the purpose of the work to be done or information that comes to the attention of the Offeror during the course of performing such work is to be kept strictly confidential.

2.36. Conflict of Interest: No public official and/or Owner employee shall have interest in any contract resulting from this RFP.

2.37. Contract: This Request for Proposal, submitted documents, and any negotiations, when properly accepted by the Owner, shall constitute a contract equally binding between the Owner and Offeror. The contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral, including the Proposal documents. The contract may be amended or modified with Change Orders, Field Orders, or Amendment.

2.38. Project Manager/Administrator: The Project Manager, on behalf of the Owner, shall render decisions in a timely manner pertaining to the work proposed or performed by the Offeror. The Project Manager shall be responsible for approval and/or acceptance of any related performance of the Scope of Services.

2.39. Contract Termination: This contract shall remain in effect until any of the following occurs: (1) contract expires; (2) completion of services; (3) acceptance of services or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation at least thirty days past notification.

2.40. Employment Discrimination: During the performance of any services per agreement with the Owner, the Offeror, by submitting a Proposal, agrees to the following conditions:

2.40.1. The Offeror shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, disability, citizenship status, marital status, veteran status, sexual orientation, national origin, or any legally protected status except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Offeror. The Offeror agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

2.40.2. The Offeror, in all solicitations or advertisements for employees placed by or on behalf of the Offeror, shall state that such Offeror is an Equal Opportunity Employer.

2.40.3. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

2.41. Affirmative Action: In executing a Contract with the City, the Contractor agrees to comply with Affirmative Action and Equal Employment Opportunity regulations presented in the General Contract Conditions.

2.42. Immigration Reform and Control Act of 1986 and Immigration Compliance: The Offeror certifies that it does not and will not during the performance of the contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration

Reform and Control Act of 1986 and/or the immigration compliance requirements of State of Colorado C.R.S. § 8-17.5-101, *et.seq.* (House Bill 06-1343).

2.43. Ethics: The Offeror shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.

2.44. Failure to Deliver: In the event of failure of the Offeror to deliver services in accordance with the contract terms and conditions, the Owner, after due oral or written notice, may procure the services from other sources and hold the Offeror responsible for any costs resulting in additional purchase and administrative services. This remedy shall be in addition to any other remedies that the Owner may have.

2.45. Failure to Enforce: Failure by the Owner at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the Owner to enforce any provision at any time in accordance with its terms.

2.46. Force Majeure: The Offeror shall not be held responsible for failure to perform the duties and responsibilities imposed by the contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Offeror, unless otherwise specified in the contract.

2.47. Indemnification: Offeror shall defend, indemnify and save harmless the Owner and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Offeror, or of any Offeror's agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from proposal award. Offeror shall pay any judgment with cost which may be obtained against the Owner growing out of such injury or damages.

2.48. Independent Firm: The Offeror shall be legally considered an Independent Firm and neither the Firm nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Firm, its servants, or agents. The Owner shall not withhold from the contract payments to the Firm any federal or state unemployment taxes, federal or state income taxes, Social Security Tax or any other amounts for benefits to the Firm. Further, the Owner shall not provide to the Firm any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.

2.49. Nonconforming Terms and Conditions: A proposal that includes terms and conditions that do not conform to the terms and conditions of this Request for Proposal is subject to rejection as non-responsive. The Owner reserves the right to permit the Offeror to withdraw nonconforming terms and conditions from its proposal prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.

2.50. Ownership: All plans, prints, designs, concepts, etc., shall become the property of the Owner.

2.51. Oral Statements: No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.

2.52. Patents/Copyrights: The Offeror agrees to protect the Owner from any claims involving infringements of patents and/or copyrights. In no event shall the Owner be liable to the Offeror for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this RFP.

2.53. Remedies: The Offeror and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

2.54. Venue: Any agreement as a result of responding to this RFP shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.

2.55. Expenses: Expenses incurred in preparation, submission and presentation of this RFP are the responsibility of the company and can not be charged to the Owner.

2.56. Sovereign Immunity: The Owner specifically reserves its right to sovereign immunity pursuant to Colorado State Law as a defense to any action arising in conjunction to this agreement.

2.57. Public Funds/Non-Appropriation of Funds: Funds for payment have been provided through the Owner's budget approved by the City Council/Board of County Commissioners for the stated fiscal year only. State of Colorado statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. Therefore, anticipated orders or other obligations that may arise past the end of the stated Owner's fiscal year shall be subject to budget approval. Any contract will be subject to and must contain a governmental non-appropriation of funds clause.

2.58. Collusion Clause: Each Offeror by submitting a proposal certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all proposals shall be rejected if there is evidence or reason for believing that collusion exists among the proposers. The Owner may or may not, at the discretion of the Owner Purchasing Representative, accept future proposals for the same service or commodities for participants in such collusion.

2.59. Gratuities: The Contractor certifies and agrees that no gratuities or kickbacks were paid in connection with this contract, nor were any fees, commissions, gifts or other considerations made contingent upon the award of this contract. If the Contractor breaches or violates this warranty, the Owner may, at their discretion, terminate this contract without liability to the Owner.

2.60. Safety Warranty: Offeror also warrants that the services performed shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970.

2.61. OSHA Standards: All Offerors agree and warrant that services performed in response to this invitation shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA Standards, the Owner may require the services to be redone at no additional expense to the Owner.

2.62. Performance of the Contract: The Owner reserves the right to enforce the performance of the contract in any manner prescribed by law or deemed to be in the best interest of the Owner in the event of breach or default of resulting contract award.

2.63. Benefit Claims: The Owner shall not provide to the Offeror any insurance coverage or other benefits, including Worker's Compensation, normally provided by the Owner for its employees.

2.64. Default: The Owner reserves the right to terminate the contract in the event the Contractor fails to meet delivery or completion schedules, or otherwise perform in accordance with the accepted proposal. Breach of contract or default authorizes the Owner to purchase like services elsewhere and charge the full increase in cost to the defaulting Offeror.

2.65. Multiple Offers: If said proposer chooses to submit more than one offer, THE ALTERNATE OFFER must be clearly marked "Alternate Proposal". The Owner reserves the right to make award in the best interest of the Owner.

2.66. Cooperative Purchasing: Purchases as a result of this solicitation are primarily for the Owner. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions and pricings established in this Proposal. The quantities furnished in this proposal document are for only the Owner. It does not include quantities for any other jurisdiction. The Owner will be responsible only for the award for our jurisdiction. Other participating entities will place their own awards on their respective Purchase Orders through their purchasing office or use their purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The Owner accepts no liability for payment of orders placed by other participating jurisdictions that choose to piggy-back on our solicitation. Orders placed by participating jurisdictions under the terms of this solicitation will indicate their specific delivery and invoicing instructions.

2.67. Definitions:

2.67.1. "Consultant" refers to the person, partnership, firm or corporation entering into an Agreement with the Owner for the services required and the legal representatives of said party or the agent appointed to act for said party in the performance of the service(s) contracted for.

2.67.2. "Offeror" refers to the person or persons legally authorized by the Consultant to make an offer and/or submit a bid (fee) proposal in response to the Owner's RFP.

2.67.3. The term "Work" includes all labor necessary to produce the requirements by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.

2.67.4. "Sub-Contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the contract documents and means a sub-contractor or his authorized representative.

2.67.5. "Owner" is the City of Grand Junction/Mesa County, Colorado and is referred to throughout the Contract Documents. The term Owner means the Owner or his authorized representative. The Owner shall, at all times, have access to the work wherever it is in preparation and progress. The Contractor shall provide facilities for such access. The Owner will make periodic visits to the site to familiarize himself generally with the progress and quality of work and to determine, in general, if the work is proceeding in accordance with the contract documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in the contract. The Owner will have authority to reject work which does not conform to the Contract documents. Whenever, in his reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he will have authority to require the Contractor to stop the work or any portion, or to require special inspection or testing of the work, whether or not such work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and sub-Contractor, or any of their agents or employees, or any other persons performing any of the work.

2.67.6. "Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or his authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specification and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency or omission he may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies or omissions. The Contractor shall not commence work without clarifying Drawings, Specifications, or Interpretations.

2.67.7. "Sub-Contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the contract documents and means a sub-contractor or his authorized representative.

2.68. Public Disclosure Record: If the Proposer has knowledge of their employee(s) or sub-proposers having an immediate family relationship with an Owner employee or elected official, the proposer must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the Owner.

2.69. **Keep Jobs in Colorado Act:** Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner,permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient Colorado labor to perform the work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion, and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17- 101(2)(a).

"Public project" is defined as:

(a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects

(b) for which appropriate or expenditure of moneys may be reasonably expected to be $500,000.00 or more in the aggregate for any fiscal year

(c) except any project that receives federal moneys.

SECTION 3.0: INSURANCE REQUIREMENTS

3.1 Insurance Requirements: The selected Firm agrees to procure and maintain, at its own cost, policy(s) of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the Firm pursuant to this Section. Such insurance shall be in addition to any other insurance requirements imposed by this Contract or by law. The Firm shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Section by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.
Firm shall procure and maintain and, if applicable, shall cause any Subcontractor of the Firm to procure and maintain insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to The Owner. All coverage shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Firm pursuant to this Section. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. Minimum coverage limits shall be as indicated below unless specified otherwise in the Special Conditions:

(a) Worker Compensation: Contractor shall comply with all State of Colorado Regulations concerning Workers' Compensation insurance coverage.

(b) General Liability insurance with minimum combined single limits of:

ONE MILLION DOLLARS ($1,000,000) each occurrence and
ONE MILLION DOLLARS ($1,000,000) per job aggregate.

The policy shall be applicable to all premises, products and completed operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall include coverage for explosion, collapse, and underground (XCU) hazards. The policy shall contain a severability of interests provision.

(c) Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than:

ONE MILLION DOLLARS ($1,000,000) each occurrence and
ONE MILLION DOLLARS ($1,000,000) aggregate

(d) Professional Liability & Errors and Omissions Insurance policy with a minimum of:
ONE MILLION DOLLARS ($1,000,000) per claim

This policy shall provide coverage to protect the contractor against liability incurred as a result of the professional services performed as a result of responding to this Solicitation.

With respect to each of Consultant's owned, hired, or non-owned vehicles assigned to be used in performance of the Work. The policy shall contain a severability of interests provision.

3.2 Additional Insured Endorsement: The policies required by paragraphs (b) above shall be endorsed to include the Owner and the Owner's officers and employees as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the Owner, its officers, or its employees, or carried by or provided through any insurance pool of the Owner, shall be excess and not contributory insurance to that provided by Contractor. The Contractor shall be solely responsible for any deductible losses under any policy required above.

SECTION 4.0: SPECIFICATIONS/SCOPE OF SERVICES

4.1. General: The general scope of services to be obtained as a result of this RFP includes preconstruction services, value engineering, construction management ("CM") and general contractor ("GC") services relative to the construction of the new Fire Station #6 **(NOTE: <u>This new station shall be based off of existing Fire Station #4 plans, that shall be modified for the new Fire Station #6</u>**). The selected CM/GC will work collaboratively with Owner's architect and City project staff. The selection of the CM/GC is expected to be concluded and approved by the City Council in November of 2019.

The time line for this project is ambitious. All planning, design and construction efforts will be expedited to the extent possible. The Owner intends to establish a <u>Not to Exceed Price</u> for all Pre-Construction Services, and a <u>Guaranteed Maximum Price</u> for the Construction portion of this project.

4.2. The total project budget (including design and construction) is estimated at approximately $3,200,000.

4.3. Designer: The Owner has selected Chamberlin Architects as the design firm for this project. The Owner shall require maximum collaboration by the Architect, the Construction Manager/General Contractor and the Owner's project staff to insure value engineering through constructability assessments, during the preconstruction phase, as well as the construction phase of the project.

4.4. Special Conditions/Provisions:

4.4.1 Term of Contract: By submitting a response to this RFP, the proposer agrees and understands that payments pursuant to this Contract are subject to and contingent upon the continuing availability of funds for the purposes herein. If such funds become unavailable, the Council may terminate all or part of this Contract immediately without further liability.

4.4.2 Pricing/Fees: Pricing shall be all inclusive to include but not be limited to: all labor, equipment, supplies, materials, freight (F.O.B. Destination – Freight Pre-paid and Allowed to each site), all design related services, travel, mobilization costs, fuel, set-up and take down costs, and full-time inspection costs, and all other costs related to the successful completion of the project.

The Owner shall not pay nor be liable for any other additional costs including but not limited to: taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.

Contractor shall submit pricing as follows: Not to Exceed Price for all Pre-Construction Services for this project; and % of OH&P for Construction Services for this project. The Owner intends to establish a Guaranteed Maximum Price for the construction portion of this project.

Also see Section 5.0, paragraph I.

4.5. Scope of Services: The general scope of services to be obtained as a result of this RFP includes preconstruction and Construction Services. These services shall consist of the following: (also see attached complete "as-built' drawings for Fire Station #4, which Fire Station #6 shall be based on).

Pre-Construction Services

a. Design Consultation During Project Development – Attend regularly scheduled meetings (as needed) with the Architect and the City during design development, and development of construction documents, to advise on site use and improvements, selection of materials, building systems and equipment. Provide recommendations on construction feasibility, availability of materials and labor, time requirements for installation and construction and factors related to cost including alternative designs or materials, preliminary budgets and possible economies. Consult with the City and the Architect to finalize construction-phasing plans based upon the preliminary project plan included with the Construction Manager's original proposal. Present schedule and cost associated with each plan. The Construction Phasing Plan must consider construction feasibility, availability of materials and labor, coordination with the City's on-going activities on the

Project sites, and other factors related to time, cost and safety.

b. Scheduling – Develop a Project Time Schedule that coordinates and integrates the Architect's design efforts with construction schedules. Update the Project Time Schedule incorporating details for the construction operations of the project, including realistic activity sequences and durations, allocation of labor and materials, processing of shop drawings, and samples and delivery of products requiring long lead-time procurement. The schedule shall include the City's other construction activities (i.e. Abatement, FF&E, Data/Telecommunications and Temperature Controls) necessary for coordination and occupancy requirements showing portions of the Project having occupancy priority.

c. Site Investigation – After receiving Construction Documents, Construction Manager shall conduct a walkthrough of the project to familiarize itself with the proposed Scope of Work and document the existing conditions of the facilities and/or site. The Construction Manager shall provide a written report to the City of any discrepancies or issues and their affects to the project identified during the site investigation walk through.

d. Construction Estimate – Prepare a construction estimate for the work based on a quantity survey of drawings and available specifications. Update and refine the construction estimate for the City's approval and acceptance as the development of the drawings and specifications proceeds. Provide detailed construction costs estimates at the completion of 100% Schematic Design (SD) and 100% Design Development (DD) documents produced by the Architect. Estimate shall include the bid amounts and construction contingencies.

e. Guaranteed Maximum Price shall be submitted for approval upon completion of the Construction Documents.

f. Value Engineering (VE) – At the end of both Schematic Design (SD) and Design Development (DD), Construction Manager shall complete a technical review and analysis of systems and materials being considered in the design to produce the greatest value for the least cost, including life cycle analysis.

(1) Design Review/Coordination of Contract Documents – Conduct a formal review of 100% Design Development documents produced by the Architect. These reviews shall address estimated cost, completeness of design, coordination of documents, and construction feasibility and work phasing and shall include detailed reviews of the structural, mechanical, plumbing and electrical work described. A written report of findings, including recommended revisions and/or value engineering proposals, shall be submitted to the City and the Architect within one week of receipt of said documents. Verify that all identified deficiencies and/or revisions authorized by the City are acknowledged by the Architect and incorporated in all subsequent documents presented and in the final Construction Documents.

g. Construction Logistic Plan – Throughout the course of design & bidding, develop (with the input from the Architect and City) options regarding the execution of the work that will be performed within the existing occupied facility. Upon the completion of design, and as part of the amendments to the contract sum, document and/or identify in the

appropriate detail as required and/or approved by the City, construction sequencing and actions required to mitigate adverse effects to ongoing daily operations of areas affected by construction activities.

h. Subcontractor Pre-Qualification – Develop and implement a subcontractor pre-qualification process, with the cooperation and approval of the City and the Architect. Recommend early pre-qualification of critical subcontractors as deemed advisable, especially for mechanical and electrical work.

i. Labor – Analyze the types, quantity and availability of appropriate categories of labor required for various phases of the Project.

j. Bidding – The Construction Manager shall establish bidding schedules and conduct pre-bid conferences to familiarize bidders with bidding documents, management techniques and any special systems, materials or methods. Solicit and receive competitive and responsible bids on the Work from qualified subcontractors and materials suppliers, pursuant to bidding procedures acceptable to the City.

k. Conferences – In concert with the City and the Architect, conduct pre-construction conferences with successful subcontractors.

Construction Services

a. Pre-Construction Conference – Prior to the commencement of work, the Construction Manager shall submit to the Architect and the City in reasonable detail and format acceptable to the Architect and the City, copies of the following documents:

1. Submittal log and schedule.
2. Request for Information (RFI) form and log format.
3. Request for Change Order form and log format.
4. List of inspections required by the Contract Documents.
5. Quality Control (QC) plan.
6. Safety plan.
7. Copies of required permits.

Upon review of the above documents by the Architect and the City, the Construction Manager shall facilitate a Pre-Construction Conference and establish project procedures and construction schedules.

b Project Control – Supervise the Work of the subcontractors and coordinate the Work with the activities and responsibilities of the City and Architect in order to complete the Project in accordance with the City's objectives of cost, time and quality.

c. Staffing – Maintain, at the Project site, a competent staff as approved by the City, to coordinate, provide overall direction of the Work, and monitor progress of the subcontractors on the Project. Assign to the Project, for the duration of the Work through correction of punch-list, a full-time competent Superintendent and any necessary assistants, as satisfactory to the City, in accordance with executed Amendments and/or Construction Managers General Conditions. The Superintendent

shall not be changed except with the consent of the City. The Superintendent shall see that the Work is carried out in accordance with the Contract Documents and shall be full time and/or shall be present on the project site during the execution of all work associated with this Agreement unless authorized by the City.

d. Organization – Establish, document and communicate an on-site organization and lines of authority in order to carry out the overall plans of the Project team.

e. Coordination – Establish and implement procedures for coordination among the City, Architect, subcontractors and the Construction Manager with respect to all aspects of the Project. Schedule and conduct weekly progress meetings with the Architect and the City. Construction Manager shall be responsible for recording and distribution of meeting minutes

f. Schedule Monitoring and Updating– Provide regular monitoring and monthly updating of the schedule as construction progresses. Identify potential variances between scheduled and projected completion dates. Review schedule for work not started or incomplete, and recommend to the City and Architect, subcontractors adjustments in the schedule to meet the scheduled completion date.

g. Change Orders – Develop and implement a system for the expeditious review and processing of Change Orders. Propose necessary or desirable changes in the Scope of Work to the City and the Architect, review requests for changes, submit recommendations to the City and the Architect and negotiate Change Orders with subcontractors.

h. Permits – Secure all necessary permits, licenses and inspections for the proposed completion and execution of the Work. Coordinate and schedule all inspections. Create and maintain a log of all inspection including copies of all "sign-offs."

i. City's Consultants/Contractors – If required, assist the City in the coordination of a surveyor, testing laboratories other special consultants, telecom/data, temperature controls and other contractors contracted directly to the City involved with work associated with contract documents.

j. Safety Measures – Establish procedures and measures for the safety of persons and property at and around the site of the Work. Assure compliance with all federal, state and local statutes, rules, regulations and orders applicable to the conduct of the Work.

k. Quality Control Program – The Construction Manager shall establish and maintain a Quality Control (QC) Program specific to the Project. The QC program shall consist of the Construction Manager's QC organization, the project specific QC plan, QC meetings, the phases of control, submittal review and approval, testing and inspections, and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations compliance with the requirements of the Contract Documents.

Quality Control is the responsibility of the Construction Manager. This Quality Control is not to be mistaken for the Quality Assurance Program provided by the City (construction materials testing & Inspection services, Architect/Engineer observations,

City roofing consultant, City test & balance services, etc.. These City-provided inspection and/or observation services are for the purpose of verifying the Construction Manager's Quality Control.

l. Contract Interpretations – Refer all questions, in writing, relative to interpretations of design intent to the Architect. Construction Manager shall implement an effective system for recording and tracking questions (RFI) and responses through final resolution and distribution to all parties concerned. At the weekly progress meeting, Construction Manager is to identify any critical questions (RFI) that may impact either schedule, cost or quality of the Project.

m. Material Submittals, Shop Drawings and Samples – In collaboration with the Architect, establish and implement procedures for expediting the processing and approval of material submittals, shop drawings and samples.

n. Reports and Project Site Documents – Record the daily progress of the Project in a daily log available to the City and the Architect. Submit, on a weekly basis, written progress reports and summaries of meetings to the City and the Architect, including information of the subcontractors' work, labor resource levels by trade, safety violations, inspections or tests and the percentage of completion of item relative to the Project Schedule.

o. Record Documents – Maintain at the Project site, on a current basis, records of all contracts, shop drawings, samples, purchases, materials, equipment, maintenance and operating manuals and instructions and any other documents and revisions thereto which arise out of the Project or the Work.

p. Start-Up and Training - With the City's maintenance personnel, schedule and direct the checkout of utilities, operating systems and equipment for readiness and assist in their initial start-up and testing by the appropriate subcontractor, representative or authority.

q Attic Stock - Turn over to the City all keys and maintenance/attic stocks required by the Contract Documents.

r Warranty – During the one-year warranty period, which starts at the date of Substantial Completion, perform two (2) warranty inspections, 1 each at 6 months and 11 months, and ensure that Work which proves defective or deficient during such time is corrected either by the subcontractors of such other means as shall be required. Administer the one-year warranty period by the City's Warranty Work Request process.

4.6. Mandatory Pre-Proposal Briefing: A **mandatory** pre-proposal briefing is required by all contractors intending to submit a response to this RFP. Any contractor that does not attend the **mandatory** pre-proposal briefing shall not be eligible to submit a response to this RFP. **The pre-proposal briefing shall be held at City Hall Auditorium, 250 N. 5th Street, Grand Junction, CO on October 2, 2019 at 2:30pm.**

4.7. RFP Tentative Time Schedule:

• Request for Proposal available	September 23, 2019
• Mandatory Pre-Proposal Meeting	October 2, 2019
• Inquiry deadline, no questions after this date	October 9, 2019
• Addendum Posted	October 10, 2019
• Submittal deadline for proposals	October 17, 2019
• Owner evaluation of proposals	October 18-23, 2019
• Interviews (if required)	October 30, 2019
• Final selection	November 1, 2019
• City Council Approval	November 20, 2019
• Contract execution	November 21, 2019

4.8. Questions Regarding Scope of Services:

Duane Hoff Jr., Senior Buyer
duaneh@gjcity.org

SECTION 5.0: PREPARATION AND SUBMITTAL OF PROPOSALS

Submission: ***Each proposal shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (https://www.rockymountainbidsystem.com/default.asp).*** *This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.)* Please view our "**Electronic Vendor Registration Guide**" at http://www.gjcity.org/BidOpenings.aspx for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline **800-835-4603**). For proper comparison and evaluation, the City requests that proposals be formatted as directed in Section 5.0 "Preparation and Submittal of Proposals." Offerors are required to indicate their interest in this Project, show their specific experience and address their capability to perform the Scope of Services in the Time Schedule as set forth herein. For proper comparison and evaluation, the Owner requires that proposals be formatted **A** to **I**:

A. **Cover Letter:** Cover letter shall be provided which explains the Firm's interest in the project. The letter shall contain the name/address/phone number/email of the person who will serve as the firm's principal contact person with Owner's Contract Administrator and shall identify individual(s) who will be authorized to make presentations on behalf of the firm. The statement shall bear the signature of the person having proper authority to make formal commitments on behalf of the firm. By submitting a response to this solicitation the Contractor agrees to all requirements herein.

B. **Qualifications/Experience/Credentials:** Proposers shall provide their qualifications (to include specifics to Fire Stations) for consideration as a contract provider to the City of Grand Junction and include prior experience in similar projects. Information provided shall include but is not limited to:

- Organizational chart of company and/or project team
- Identification of key personnel
- Professional qualifications, resumes and functions of personnel who will be assigned to the project
- Specific related project experience of personnel
- Personnel availability and time commitment proposed to meet the project schedule

C. **Strategy and Implementation Plan:** Describe your (the firm's) interpretation of the Owner's objectives with regard to this RFP. Describe your proposed CM/GC management strategy and/or plan for achieving the objectives of this RFP. Provide examples of control systems you propose to use in the execution of this project:

- Cost control
- Schedule control
- Quality control (value engineering, methodology)
- Value Engineering

The Firm may utilize a written narrative or any other printed technique to demonstrate their ability to satisfy the Scope of Services. The narrative should describe a logical progression of tasks and efforts starting with the initial steps or tasks to be accomplished and

continuing until all proposed tasks are fully described and the RFP objectives are accomplished. Include a **time schedule** for completion of your firm's implementation plan and an estimate of time commitments from Owner staff.

D. **Current and Anticipated Workload:** Describe your current workload and expectations in coordinating your current projects, anticipated projects and this project.

E. **Capability/Performance:** Provide brief project descriptions and histories that delineate your ability for at least four (4) projects completed in the past five years with a similar size and scope to this project. Provide as a minimum:

- Project description
- Project budget at SD and DD
- Guaranteed Maximum Price
- Total dollar amount of change orders (exclusive of change of scope change orders)
- Completed project cost inclusive of all change orders, final contractor fees, and general conditions.
- Gross square footage, number of stories, and number of parking spaces
- Major structural system(s)
- Special or unique conditions, systems, characteristics, etc.
- Original and actual construction schedule comparisons
- Owner's representative name and contact information

F. **Bonding Capacity:** Provide proof of bonding capacity for this project including CM/GC fees along with current and anticipated project workloads.

G. **References:** A minimum of three (4) **references** with name, address, telephone number, and email address that can attest to your experience CM/GC projects of similar scope and size.

H. **Fee Proposal:** The construction duration for this project will be determined during the course of design and the development of the "Construction Logistics Plan". Contractor shall submit pricing as follows: Not to Exceed Price for all Pre-Construction Services for this project; and % of OH&P for Construction Services for this project. The Owner intends to establish a Guaranteed Maximum Price for the construction portion of this project. Include the following:

1. Fee & Pre-Construction Services

The Construction Manager fee shall be all inclusive, and include all job indirect costs, home office overhead and profit, including, but not limited, to the following:

a Salaries benefits and taxes or other compensation of the Construction Manager's employees at the principal office and branch offices;

b General operating expenses of the Construction Manager's principal and branch offices other than the field office;

c Any part of the Construction Manager's capital expenses, including interest on the Construction Manager's capital employed for the Project;

d Overhead or general expenses of any kind;
e Salaries of the Construction Manager's principal(s) or branch office employees when at the field office in whatever capacity employed and such employees when engaged on the road in expediting the production or transportation of materials and equipment;
f Cost of data processing services required in the performance of the Work;
g Cost of the premium for all insurance which the Construction Manager is required to procure by this Agreement or is deemed necessary by the Construction Manager;
h Minor expenses such as facsimile messages, telegrams, long distance telephone calls, express mailing and similar petty cash items in connection with Pre-construction and/or the Construction Services;

2. General Conditions

The Construction Manager General Conditions shall include all job direct onsite management costs including, but not limited, to the following:

a Onsite Staff – Project Manager, Project Superintendent, Assistant Superintendent(s), Office/Field Engineers, Field Inspectors, and Secretary. All onsite employees of the Construction Manager with the exception of self-performed work authorized by the City and bid in accordance with this agreement, shall be considered staff and shall be identified within the General Conditions and not part of the "Direct Cost of the Work".
b Onsite Equipment and office expenses – personal computers, copy machine, fax machine, first aid supplies, office or trailer rental, storage trailer, telephones, generators (for construction manager's office), radios and office furniture, facsimile messages, telegrams, long distance telephone calls and mailings;
c Onsite Services – temporary toilets, project sign, bulletin boards, street / walk / parking lot cleaning / snow removal and trash removal;
d Onsite Utilities – temporary enclosures / weather protection, temporary building heat, temporary electrical service, temporary gas and power charges and temporary water;
e Safety – safety programs, handrails and toe boards, fire extinguishers, temporary stairs, construction fencing and covered walkways;
f Insurance and Bonds – errors and omissions, general liability, workers' compensation, FICA, federal and state unemployment and performance and payment bonds and builders risk;
g Miscellaneous – project photographs, warranty inspection and coordination.

I. **Additional Data (optional):** Provide any additional information that will aid in evaluation of your qualifications with respect to this project.

SECTION 6.0: EVALUATION CRITERIA AND FACTORS

6.1 **Evaluation:** An evaluation team shall review all responses and select the proposal or proposals that best demonstrate the capability in all aspects to perform the scope of services and possess the integrity and reliability that will ensure good faith performance.

6.2 **Intent:** Only respondents who meet the qualification criteria will be considered. Therefore, it is imperative that the submitted proposal clearly indicate the firm's ability to provide the services described herein.

Submittal evaluations will be done in accordance with the criteria and procedure defined herein. The Owner reserves the right to reject any and all portions of proposals and take into consideration past performance. The following parameters will be used to evaluate the submittals (in no particular order of priority):

- Responsiveness of submittal to the RFP
- Understanding of the project and the objectives
- Experience/Performance CM/GC (to include specifics to Fire Stations)
- Necessary resources/Capacity & Availability
- Strategy & Implementation Plan
- References
- Fees

Owner also reserves the right to take into consideration past performance of previous awards/contracts with the Owner of any vendor, contractor, supplier, or service provider in determining final award(s).

The Owner will undertake negotiations with the top rated firm and will not negotiate with lower rated firms unless negotiations with higher rated firms have been unsuccessful and terminated.

6.3 **Oral Interviews:** The Owner may invite the most qualified rated proposers to participate in oral interviews.

6.4 **Award:** Firms shall be ranked or disqualified based on the criteria listed in Section 6.2. The Owner reserves the right to consider all of the information submitted and/or oral presentations, if required, in selecting the project Contractor.

SECTION 7.0: SOLICITATION RESPONSE FORM

Bid Date: _____

Project: RFP-4703-19-DH "City of Grand Junction Fire Station #6 CM/GC"

Bidding Company: _____

Name of Authorized Agent: _____

Email _____

Telephone_____ **Address**_____

City_____**State**_____**Zip**_____

The undersigned Bidder, in compliance with the Request for Proposals, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Solicitation Response Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a proposal for the purpose of restricting competition.
- The individual signing this proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-903544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of _____ percent of the net dollar will be offered to the Owner if the invoice is paid within _____ days after the receipt of the invoice.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Scope of Services, and other Contract Documents.

State number of Addenda received: _____.

It is the responsibility of the Offeror to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: _____

Authorized Signature: _____

Title: _____

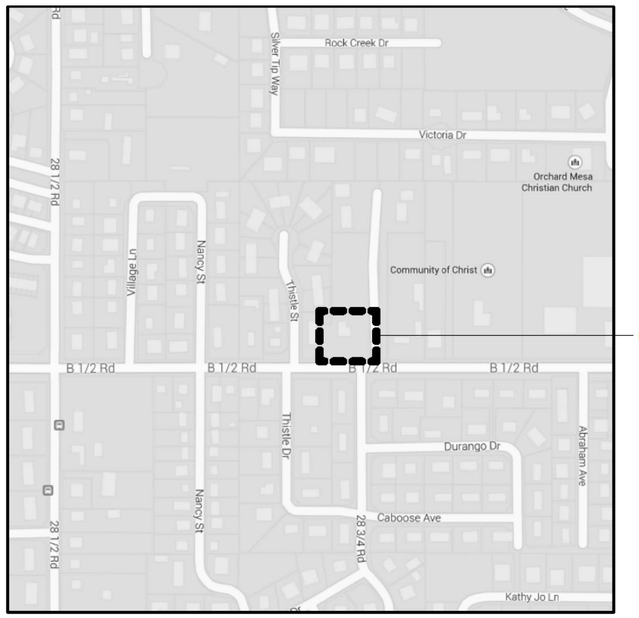
ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LOCALITY MAP

BUILDING SITE

VICINITY MAP



BUILDING SITE

OWNER

CITY OF GRAND JUNCTION
250 N. 5th Street
Grand Junction, CO 81501

DESIGN TEAM

ARCHITECT:
CHAMBERLIN ARCHITECTS
437 Main Street
Grand Junction, CO 81501
(970) 242-6804

CIVIL:
AUSTIN CIVIL GROUP
123 North 7th Street, Suite 300
GRAND JUNCTION, CO 81501
PHONE: (970) 242 -7540

LANDSCAPE:
JULEE WOLVERTON
61945 Nighthawk Road
Montrose, CO 81403
(970) 249-9392

STRUCTURAL:
LINDAUER DUNN, INC
802 Rood Avenue
Grand Junction, CO 81501
(970) 241-0900

MECHANICAL:
RALSTON MECHANICAL CONSULTING, LLC
356 Echo Canyon Court
Grand Junction , CO 81507
(970) 434-9819

ELECTRICAL:
GRAND VALLEY ENGINEERING SOLUTIONS
2961 Circling Hawk Court
Grand Junction, CO 81503
(970) 256-0353

DRAWING LIST

GENERAL
G001 COVER SHEET

CIVIL
C-2 GENERAL NOTES & DETAILS
C-3 DEMOLITION PLAN
C-4 SITE PLAN
C-5 UTILITY PLAN
C-6 UTILITY DETAILS
C-7 HORIZONTAL CONTROL PLAN
C-8 OVERALL GRADING PLAN
C-9 GRADING PLAN SHEET 1
C-10 GRADING PLAN SHEET 2

LANDSCAPE
L101 LANDSCAPE PLAN
L201 LANDSCAPE ENLARGEMENT PLAN
L301 LANDSCAPE LEGENDS
L401 LANDSCAPE DETAILS

IRRIGATION
IR-101 IRRIGATION PLAN
IR-201 IRRIGATION LEGEND
IR-301 IRRIGATION NOTES & DETAILS
IR-302 IRRIGATION DETAILS

ARCHITECTURAL
A001 NOTES, SYMBOLS, ABBREVIATIONS AND WALL TYPES
A002 CODE CHECKLIST & LIFE SAFETY PLAN
A101 FLOOR PLAN
A121 REFLECTED CEILING PLAN
A141 ROOF PLAN
A151 FURNITURE, FIXTURES, AND EQUIPMENT
A161 INTERIOR FINISH PLAN
A201 EXTERIOR ELEVATIONS
A202 EXTERIOR ELEVATIONS
A301 ENLARGED FLOOR PLANS
A401 INTERIOR ELEVATIONS
A402 INTERIOR ELEVATIONS
A403 INTERIOR ELEVATIONS
A404 INTERIOR ELEVATIONS
A405 INTERIOR ELEVATIONS
A406 INTERIOR ELEVATIONS
A501 WALL SECTIONS
A502 WALL SECTIONS
A503 WALL SECTIONS
A504 WALL SECTIONS
A601 ARCHITECTURAL DETAILS

DRAWING LIST

A602 ARCHITECTURAL DETAILS
A603 ARCHITECTURAL DETAILS
A604 MONUMENT SIGN DETAILS
A621 CASEWORK DETAILS
A622 CASEWORK SECTIONS
A701 DOOR SCHEDULE, FRAME, DOOR, WINDOW & SIGN TYPES
A702 DOOR DETAILS
A721 WINDOW DETAILS
A741 COLOR SCHEDULE

STRUCTURAL
S100 GENERAL NOTES
S101 SCHEDULE OF SPECIAL INSPECTIONS
S102 FOUNDATION PLAN
S103 LOW ROOF FRAMING PLAN
S104 UPPER ROOF FRAMING PLAN
S200 TYPICAL FOUNDATION DETAILS
S201 MASONRY DETAILS
S202 CMU WALL ELEVATIONS
S203 CMU WALL ELEVATIONS
S204 TYPICAL STEEL FRAMING DETAILS
S205 TYPICAL WOOD FRAMING DETAILS
S300 FOUNDATION SECTIONS
S301 FRAMING SECTIONS
S302 FRAMING SECTIONS

MECHANICAL
M001 MECHANICAL SCHEDULES AND LEGEND
M101 MECHANICAL PLAN
M301 MECHANICAL DETAILS

PLUMBING
P101 PLUMBING PLAN
P201 ENLARGED PLUMBING PLAN & GAS PIPING SITE PLAN
P301 PLUMBING DETAILS

ELECTRICAL
E101 LEGEND, SITE PLAN, ONE LINE & DETAILS
E201 LIGHTING PLAN
E301 POWER PLAN
E302 LIGHTING PROTECTION & ROOF PLAN
E401 SYSTEMS PLAN
E402 ALERTING SYSTEM PLAN
E501 SCHEDULES
E502 SCHEDULES
E503 SCHEDULES
E504 SCHEDULES
E505 SCHEDULES

100% CONSTRUCTION DOCUMENTS

CHAMBERLIN ARCHITECTS
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T 970.242.6804

725 Saint Joseph St., Suite B1
Rapid City, South Dakota 57701
T 605.355.6804

www.chamberlinarchitects.com

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

COVER SHEET

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **G001**

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12/5/2014 3:30:03 PM

GENERAL CONSTRUCTION NOTES

1. Locations of existing utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.

2. The Contractor shall notify the engineer if unanticipated conditions area encountered during completion of the work which require modifications to the contract drawings. The engineer can be reached at 970–242–7540.

3. Contractor shall give 48–hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior commencement of work. Contractor shall assure himself that all construction permits are current.

4. Contractor shall confine his construction operations to the right–of–way, easements, and lots, as shown on plans and plat. Any damage to private facilities outside these limits shall be repaired by the Contractor at no expense to the Owner.

5. All road construction, related work, materials, performance and quality of work provided shall conform to the requirements of the City of Grand Junction Standard Specifications and Drawings and the applicable sections of the most current edition of the Division of Highways, State of Colorado Standard Specifications for Road and Bridge Construction, Colorado Standard Plans, Division of Highways M & S Standards.

6. Contractor shall familiarize himself with the geotechnical testing requirements of the City of Grand Junction. The results of the required types of tests and numbers of passing tests shall be furnished to the Engineer for verification before final acceptance by the Owner will be granted. All failing tests shall be brought to the immediate attention of the Engineer and retests shall be performed until passing results are obtained. All utility lines, including service lines falling shall be tested.

7. All earthwork operations shall be completed in accordance with the recommendations and requirements of the Geotechnical and Geologic Hazards Investigation Report by Huddleston–Berry, Project #00390–0003, dated November 20, 2014.

8. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for utility trench back fill unless otherwise approved by the Engineer.

9. All utility installations within the City of Grand Junction jurisdiction are to be performed in accordance with the City of Grand Junction Standard Specifications for the Construction of Underground Utilities and Standard Details.

10. All sewer lines must be tested and approved per Orchard Mesa Sanitation District requirements PRIOR to street construction. Contractor is required to notify the Owner's representative PRIOR to testing. The Owner's representative must be present to witness testing of water and sewer lines or the City will not approve the installation.

11. In the event of a descrepancy between the construction notes contained herein and the notes and details in the City of Grand Junction Standard Contract Documents for Capital Improvements Construction manual, the City's manual shall control.

12. All work within the City of Grand Junction Right–of–Way shall required a "Work in the Right–of–Way" Permit. All construction work shall be in accordance with the latest edition of the City of Grand Junction Standard Specifications.

13. All concrete shall have a minimum of 6: Class VI ABC, unless otherwise noted.

PAVING CONSTRUCTION NOTES

1. All road widths and radii are to flow line unless noted otherwise. Any "spot" design elevations are to flow line of curb and gutter unless otherwise noted.

2. Prior to pavement placement, the pavement prism should be stripped of all unsuitable materials. The subgrade soils shall be scarified to a depth of 12–inches, moisture conditioned, and recompacted to a minimum of 95% of the standard Proctor maximum dry density, within ±2% of optimum moisture as determined by AASHTO T–99.

3. Contractor to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered, or filled with dirt or debris by the Contractor shall be cleaned and repaired at no expense to the Owner.

4. Where proposed pavement is to match existing pavement, existing pavement is to be squared cut, full base thickness is to be brought to match line and existing surface is to be tack–coated before proposed surface is placed.

5. All handicap ramps, sidewalks and curb and gutter are to be constructed where indicated on the plans and in accordance The City of Grand Junction requirements..

6. Curb, gutter, and drainage pans are to have expansion joints at each change in horizontal alignment of curb and gutter, but in no case at a greater distance apart than 100 feet. Locate dummy grooved joints between expansion joints at intervals not exceeding 10 feet. Where length of pour precludes 10 foot intervals, the end sections may be less then 10 feet but not less than 5 feet.

7. PAVEMENT SECTION: Automobile Parking – "Hot–Mix Asphalt" 3–inch HMA over 6–inch CDOT Class 6 over 6" CDOT Class 3 over 12–inch scarified & recompacted subgrade. Truck Traffic – "Hot–Mix Asphalt" 3–inch HMA over 6–inch CDOT Class 6 over 16" CDOT Class 3 over 12–inch scarified & recompacted subgrade. "Rigid Pavement" 6–inch or 8–inch Portland Cement Concrete w/ #4 bars @ 16" cntrs., E.W. over 6–inch CDOT Class 6 over 12–inch scarified & recompacted subgrade.

Summary of Pavement Recommendations

Automobile Parking Areas
EDLA = 5, Structural Number = 2.75

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
Full Depth HMA	7.0				7.0
A	3.0	10.0			13.0
B	4.0	7.0			11.0
C	3.0	6.0	6.0		15.0
Rigid Pavement		6.0		6.0	12.0

Truck Traffic Areas
EDLA = 30, Structural Number = 3.70

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
Full Depth HMA	9.0				9.0
A	3.0	17.0			20.0
B	4.0	14.0			18.0
C	3.0	6.0	16.0		25.0
Rigid Pavement		6.0		8.0	14.0

WATER LINE CONSTRUCTION

1. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL BACKFLOW PREVENTION EQUIPMENT AND ABOVE GROUND ENCLOSURES. Double Check Detector Assembly devise shall be "Watts" Series L709DCDA assemblies or FEBCO Masterseries 876VST (N–Pattern), or Ute Water Approved equal.

2. Above Ground Enclosures shall be as manufactured by Aqua Shield or WATTS or approved equal and be aluminum, insulated with freeze protection, heated, with service access and mounted on a 4" minimum thick concrete slab. Aqua Shield #NBFP8 or Watts Model # WB–N6 or Ute Water approved Equal.

3. All water line and water service construction shall be constructed in accordance with the Ute Water District Standards and Specifications.

4. Contractor shall notify the Ute Water Conservancy 48 hours prior to the beginning of construction of any water line related work.

5. All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T–99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab.

6. Minimum cover required over top of new waterlines is 4'–6".

7. All water mains to be DR–18 PVC, conforming to AWWA C–900.

8. Ductile Iron fittings to conform to AWWA C–110.

9. Fire Hydrants shall conform to AWWA C–502, Mueller Super Centurian or Kennedy Gaurdian.

10. All materials labor and equipment required for testing and disinfection of water lines shall be furnished by Contractor. Disinfection of water lines shall conform to AWWA C–651–86 or latest revision thereof. No separate pay.

11. All pipe bends/angle points, both horizontal and vertical, as called for on the plans are to be thrust blocked per Ute Water Conservancy District details and Technical Specifications.

12. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for water line trench backfill unless otherwise approved by the Engineer.

13. All Ute Water Mains are to be bedded per City of Grand Junction Standards.

14. All water service lines 2" and smaller from the meter to the building structure shall be "Pure Core" blue, 200 psi rated HDPE pipe, or approved equal.

STORM SEWER CONSTRUCTION NOTES

1. All storm sewer line construction shall be in accordance with the City of Grand Junction Standards and Specifications.

2. All Reinforced Concrete storm sewer pipe shall conform to ASTM Standard Specifications, C–76, Class III unless otherwise noted.

3. All polyvinyl chloride (PVC) pipe and fittings shall conform to ASTM Standard Specifications, D3034 and F679, SDR–35 unless otherwise noted.

4. All High Density Polyethylene (HDPE) pipe and fittings shall be smooth bore and shall conform to the following:
12 inch to 36 inch shall meet ASSHTO M294
42 inch to 48 inch shall meet ASSHTO MP6
All HDPE pipe up to 30" shall be backfilled to springline with Class–6.

FUGITIVE DUST CONTROL PLAN

1. Before stripping of the site preparation for overlot grading, the surface is to be pre–wet to control dust.

2. Any stockpiles of stripping materials are to be periodically sprayed with water or a crusting agent to stabilize potentially wind blown material.

3. Haul road both into and around the site are to be sprayed as needed to suppress dust.

4. The Storm Water Management Plan and permit shall be obtained and kept onsite before starting any construction work. Gravel pads are to be constructed at the entrances to the site to help in removing mud from the wheels of haulage trucks before they enter onto City streets.

5. Trucks hauling import fill are to be tarped to aid in the control of airborne dust.

UTILITIES AND AGENCIES

ORCHARD MESA SANITATION DISTRICT	STEVE LABONDE	241–7076
UTE WATER	JIM DAUGHETY	242–7491
GRAND VALLEY IRRIGATION	PHIL BERTRAND	242–2762
CITY OF GRAND JUNCTION PUBLIC WORKS	MARK BARSLAND	256–4106
XCEL ENERGY	JOHN PRICE	244–2693
CENTURY LINK	CHRIS JOHNSON	244–4311
BRESNAN COMMUNICATIONS	JOHN VALDEZ	245–8750

SANITARY SEWER CONSTRUCTION NOTES

1. The Orchard Mesa Sanitation District plan review is only for general conformance with the Orchard Mesa Sanitation District Design Criteria. The District is not responsible for the accuracy and adequacy of the design, of dimensions, and elevations which shall be confirmed and correlated at the job site. The Orchard Mesa Sanitation District, through the approval of this document, assumes no responsibility other than as stated above for the completeness and/or accuracy of this document.

2. All sewer line construction shall conform to the Orchard Mesa Sanitation District's Standards and Specifications.

3. All materials and workmanship shall be subject to inspection by the District. The District reserves the right to accept or reject any materials and workmanship that does not conform to its Standards and Specifications.

4. The Contractor shall have one (1) signed set of the Plans (approved by the Orchard Mesa Sanitation District), and one (1) copy of the appropriate Orchard Mesa Sanitation District STANDARDS AND SPECIFICATIONS at the job site at all times. The Contractor shall also have a copy of any permits necessary to complete the Work.

5. The Contractor shall notify the District at least 48 hours prior to commencement of construction.

6. All sanitary sewer pipe shall be PVC SDR35 unless otherwise specified. All pipe joints shall be 13 foot joints unless otherwise approved by the District Engineer.

7. All sewer mains shall be laid to grade utilizing a pipe laser.

8. All service line connections to the new main shall be accomplished with full body wyes or tees. Tapping saddles will not be allowed.

9. All trenches shall be complacted to 95% as determined by AASHTO T–99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab to a level required by City of Grand Junction Standard's and Specifications. A copy of the compaction test results shall be provided to the District during the course of the project.

10. A minimum 10–foot separation shall be maintained at all times between waterlines and sewer line (except at specified crossings).

11. All sanitary sewer services to be 4" PVC SDR35 unless otherwise specified.

12. Sewer service stub–outs shall extend 14 feet beyond the property line and shall be glue–capped and marked with a 2x4 post painted green.

13. Manholes shall be constructed as shown on the Orchard Mesa Sanitation District Standard Sanitary Sewer Detail Sheet. At the District's direction, the Contractor shall field vacuum test manholes to ensure that they are of watertight construction and that manholes have not been damaged during installation.

14. No service lines shall be connected directly into manholes.

15. All work to install the new sewer service to the District's 10–inch sewer main is to be completed by the District's Contractor, unless otherwise approved by the District. The District's Contractor will also extend the sewer service line from the new tap connection to the property line. All the District's expenses related to installing the new tap and extending the new sewer service line to the property line are to be paid by the Petitioner.

16. Manhole cone and flat top sections shall be positioned such that the manhole ring and cover are offset 20 degrees to 30 degrees from the upstream main sewer line into the manhole. Manhole steps shall be installed in vertical alignment with the ring and cover.

17. Steel paving rings are not allowed for grade adjustment unless otherwise approved by the District.

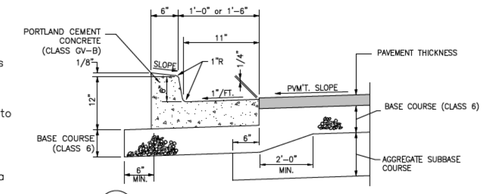
18. The Contractor is responsible for all required sewer line testing to be completed in the presence of the District Engineer or their representative. Final testing is to be accomplished only after all other infrastructure has been installed. This includes waterlines, gas lines, electric lines, etc. Testing will be performed after all compaction of street subgrade and prior to street paving. Final lamping will also be accomplished after paving is completed to insure that the line is clean. These tests will be the basis for issuing Initial Acceptance of the sewer line extension.

19. Sanitary sewer cleanouts located within traveled surface areas shall be provided with a cast–iron traffic rated lamp hole cover.

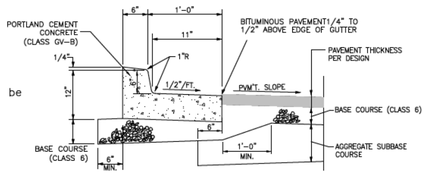
LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CURB/GUTTER
- PROPOSED CURB/GUTTER
- PROPOSED SPILL CURB/GUTTER
- PROPOSED TRANSITION CURB/GUTTER
- EXISTING RETAINING WALL
- EXISTING 1–FT CONTOUR
- EXISTING 5–FT CONTOUR
- PROPOSED 1–FT CONTOUR
- PROPOSED 5–FT CONTOUR
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED HEAVY DUTY ASPHALT
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED HEAVY DUTY CONCRETE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER INLET
- PROPOSED STORM SEWER INLET
- EXISTING STORM SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- PROPOSED INLINE DRAIN
- EXISTING 8" WATER MAIN
- PROPOSED 2" DOMESTIC SERVICE
- PROPOSED 4" FIRE LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER METER
- PROPOSED WATER METER
- PROPOSED METER/BACKFLOW VAULT
- PROPOSED IRRIGATION MANHOLE
- PROPOSED FENCE
- EXISTING FENCE
- PROPOSED TRAFFIC FLOW
- GRADE BREAK
- ROOF DRAIN (RD)
- STREET LIGHT POLE
- FIRE DEPARTMENT CONNETION
- PARKING LOT LIGHT
- PROPOSED BUILDING LIGHT
- POWER POLE
- FL FLOWLINE
- EOP EDGE OF PAVEMENT
- TOC TOP OF CONCRETE
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- TBW TOP BACK OF WALK
- TC TOP OF CURB
- BOC BACK OF CURB
- LS LANDSCAPE AREA
- UTILITY PEDESTALS

TYPICAL CONCRETE SECTIONS



A *STANDARD 1'–6" CURB AND GUTTER*
NOT TO SCALE



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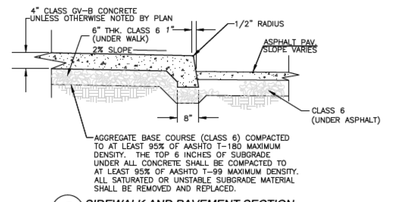
NOT TO SCALE



C *SIDEWALK AND PAVEMENT SECTION*
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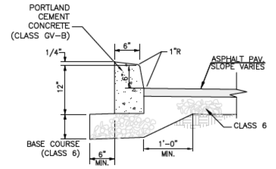

D *BARRIER CURB*
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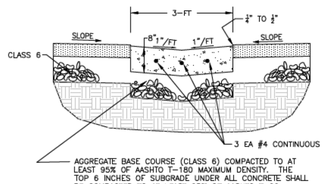
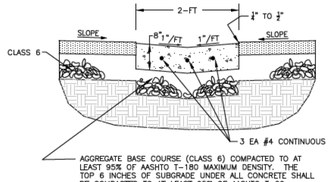


E *3' WIDE VALLEY PAN DETAIL*
NOT TO SCALE



F *2' WIDE VALLEY PAN DETAIL*
NOT TO SCALE

CHAMBERLIN ARCHITECTS
ENHANCING EVERYDAY LIVING THROUGH DESIGN

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GENERAL NOTES AND DETAILS

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	REVIEW COMMENTS RND#2	6-3-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-2

PROJECT NO: 1443

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PR 03

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12/5/2014 3:30:03 PM

GENERAL CONSTRUCTION NOTES

1. Locations of existing utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.

2. The Contractor shall notify the engineer if unanticipated conditions area encountered during completion of the work which require modifications to the contract drawings. The engineer can be reached at 970–242–7540.

3. Contractor shall give 48–hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior commencement of work. Contractor shall assure himself that all construction permits are current.

4. Contractor shall confine his construction operations to the right–of–way, easements, and lots, as shown on plans and plat. Any damage to private facilities outside these limits shall be repaired by the Contractor at no expense to the Owner.

5. All road construction, related work, materials, performance and quality of work provided shall conform to the requirements of the City of Grand Junction Standard Specifications and Drawings and the applicable sections of the most current edition of the Division of Highways, State of Colorado Standard Specifications for Road and Bridge Construction, Colorado Standard Plans, Division of Highways M & S Standards.

6. Contractor shall familiarize himself with the geotechnical testing requirements of the City of Grand Junction. The results of the required types of tests and numbers of passing tests shall be furnished to the Engineer for verification before final acceptance by the Owner will be granted. All failing tests shall be brought to the immediate attention of the Engineer and retests shall be performed until passing results are obtained. All utility lines, including service lines falling shall be tested.

7. All earthwork operations shall be completed in accordance with the recommendations and requirements of the Geotechnical and Geologic Hazards Investigation Report by Huddleston–Berry, Project #00390–0003, dated November 20, 2014.

8. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for utility trench back fill unless otherwise approved by the Engineer.

9. All utility installations within the City of Grand Junction jurisdiction are to be performed in accordance with the City of Grand Junction Standard Specifications for the Construction of Underground Utilities and Standard Details.

10. All sewer lines must be tested and approved per Orchard Mesa Sanitation District requirements PRIOR to street construction. Contractor is required to notify the Owner's representative PRIOR to testing. The Owner's representative must be present to witness testing of water and sewer lines or the City will not approve the installation.

11. In the event of a descrepancy between the construction notes contained herein and the notes and details in the City of Grand Junction Standard Contract Documents for Capital Improvements Construction manual, the City's manual shall control.

12. All work within the City of Grand Junction Right–of–Way shall required a "Work in the Right–of–Way" Permit. All construction work shall be in accordance with the latest edition of the City of Grand Junction Standard Specifications.

13. All concrete shall have a minimum of 6: Class VI ABC, unless otherwise noted.

PAVING CONSTRUCTION NOTES

1. All road widths and radii are to flow line unless noted otherwise. Any "spot" design elevations are to flow line of curb and gutter unless otherwise noted.

2. Prior to pavement placement, the pavement prism should be stripped of all unsuitable materials. The subgrade soils shall be scarified to a depth of 12–inches, moisture conditioned, and recompacted to a minimum of 95% of the standard Proctor maximum dry density, within ±2% of optimum moisture as determined by AASHTO T–99.

3. Contractor to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered, or filled with dirt or debris by the Contractor shall be cleaned and repaired at no expense to the Owner.

4. Where proposed pavement is to match existing pavement, existing pavement is to be squared cut, full base thickness is to be brought to match line and existing surface is to be tack–coated before proposed surface is placed.

5. All handicap ramps, sidewalks and curb and gutter are to be constructed where indicated on the plans and in accordance The City of Grand Junction requirements..

6. Curb, gutter, and drainage pans are to have expansion joints at each change in horizontal alignment of curb and gutter, but in no case at a greater distance apart than 100 feet. Locate dummy grooved joints between expansion joints at intervals not exceeding 10 feet. Where length of pour precludes 10 foot intervals, the end sections may be less then 10 feet but not less than 5 feet.

7. PAVEMENT SECTION: Automobile Parking – "Hot–Mix Asphalt" 3–inch HMA over 6–inch CDOT Class 6 over 6" CDOT Class 3 over 12–inch scarified & recompacted subgrade. Truck Traffic – "Hot–Mix Asphalt" 3–inch HMA over 6–inch CDOT Class 6 over 16" CDOT Class 3 over 12–inch scarified & recompacted subgrade. "Rigid Pavement" 6–inch or 8–inch Portland Cement Concrete w/ #4 bars @ 16" cntrs., E.W. over 6–inch CDOT Class 6 over 12–inch scarified & recompacted subgrade.

Summary of Pavement Recommendations

Automobile Parking Areas
EDLA = 5, Structural Number = 2.75

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
Full Depth HMA	7.0				7.0
A	3.0	10.0			13.0
B	4.0	7.0			11.0
C	3.0	6.0	6.0		15.0
Rigid Pavement		6.0		6.0	12.0

Truck Traffic Areas
EDLA = 30, Structural Number = 3.70

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
Full Depth HMA	9.0				9.0
A	3.0	17.0			20.0
B	4.0	14.0			18.0
C	3.0	6.0	16.0		25.0
Rigid Pavement		6.0		8.0	14.0

WATER LINE CONSTRUCTION

1. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL BACKFLOW PREVENTION EQUIPMENT AND ABOVE GROUND ENCLOSURES. Double Check Detector Assembly devise shall be "Watts" Series L709DCDA assemblies or FEBCO Masterseries 876VS (N–Pattern), or Ute Water Approved equal.

2. Above Ground Enclosures shall be as manufactured by Aqua Shield or WATTS or approved equal and be aluminum, insulated with freeze protection, heated, with service access and mounted on a 4" minimum thick concrete slab. Aqua Shield #NBFP8 or Watts Model # WB–N6 or Ute Water approved Equal.

3. All water line and water service construction shall be constructed in accordance with the Ute Water District Standards and Specifications.

4. The Contractor is responsible to install meter pits and yokes which will be SUPPLIED BY UTE WATER

5. Contractor shall notify the Ute Water Conservancy 24 hours prior to the beginning of construction of any water line related work.

6. All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T–99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab.

7. Minimum cover required over top of new waterlines is 4'–6".

8. All water mains to be DR–18 PVC, conforming to AWWA C–900.

9. Ductile Iron fittings to conform to AWWA C–110.

10. Fire Hydrants shall conform to AWWA C–502, Mueller Super Centurian or Kennedy Gaurdian.

11. All materials labor and equipment required for testing and disinfection of water lines shall be furnished by Contractor. Disinfection of water lines shall conform to AWWA C–651–86 or latest revision thereof. No separate pay.

12. All pipe bends/angle points, both horizontal and vertical, as called for on the plans are to be thrust blocked per Ute Water Conservancy District details and Technical Specifications.

13. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for water line trench backfill unless otherwise approved by the Engineer.

14. All Ute Water Mains are to be bedded per City of Grand Junction Standards.

15. All water service lines 2" and smaller from the meter to the building structure shall be "Pure Core" blue, 200 psi rated HDPE pipe, or approved equal.

STORM SEWER CONSTRUCTION NOTES

1. All storm sewer line construction shall be in accordance with the City of Grand Junction Standards and Specifications.

2. All Reinforced Concrete storm sewer pipe shall conform to ASTM Standard Specifications, C–76, Class III unless otherwise noted.

3. All polyvinyl chloride (PVC) pipe and fittings shall conform to ASTM Standard Specifications, D3034 and F679, SDR–35 unless otherwise noted.

4. All High Density Polyethylene (HDPE) pipe and fittings shall be smooth bore and shall conform to the following:
12 inch to 36 inch shall meet ASSHTO M294
42 inch to 48 inch shall meet ASSHTO MP6
All HDPE pipe up to 30" shall be backfilled to springline with Class–6.

FUGITIVE DUST CONTROL PLAN

1. Before stripping of the site preparation for overlot grading, the surface is to be pre–wet to control dust.

2. Any stockpiles of stripping materials are to be periodically sprayed with water or a crusting agent to stabilize potentially wind blown material.

3. Haul road both into and around the site are to be sprayed as needed to suppress dust.

4. The Storm Water Management Plan and permit shall be obtained and kept onsite before starting any construction work. Gravel pads are to be constructed at the entrances to the site to help in removing mud from the wheels of haulage trucks before they enter onto City streets.

5. Trucks hauling import fill are to be tarped to aid in the control of airborne dust.

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ORCHARD MESA SANITATION DISTRICT NOTES

1. All sewer line construction shall conform to Orchard Mesa Sanitation District's standard specifications.

2. All material and workmanship subject to inspection by the District. The District reserves the right to accept or reject any materials and workmanship that does not conform to its Standards and Specifications.

3. The Contractor shall have one signed copy of the Plans and a copy of the District's Standards and Specifications at the job site at all times.

4. All sanitary sewer pipe shall be PVC SDR–35 unless otherwise specified. All pipe joints shall be 13 foot joints unless otherwise approved by the District Engineer.

5. All sewer mains shall be laid to grade utilizing a pipe laser.

6. All service line connections to the new main shall be accomplished with full body wyes or tees. Tapping saddles will not be allowed.

7. All trenches shall be compacted to 90% within 2% of optimum moisture content, as determined AASHTO T–180. Contractor shall be required to perform all necessary compaction tests through a certified soils lab. A copy of the compaction test results shall be provided to the District during the course of the project.

8. A minimum 10–foot separation shall be maintained at all times between waterlines and sewer lines (except at specified crossings).

9. All sanitary sewer services to be 4" PVC SDR 35 unless otherwise specified.

10. Sewer service stub–outs shall extend 14 feet beyond the property line and shall be glue–capped and marked with a 2x4 post painted green.

11. The Contractor shall notify the District at least 48 hours prior to commencement of construction.

12. Manholes shall be constructed as shown on the Orchard Mesa Sanitation District Standard Sanitary Sewer Detail sheet. At the District's direction, the Contractor shall field vacuum test manholes to ensure that they are of watertight construction and that manholes have not been damaged during installation.

13. No service lines shall be connected directly into manholes.

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17. Where sanitary sewers cross under a water line with less than 18 inches of vertical separation, and in all cases where the sanitary sewer crosses over the waterline at any depth, provide total concrete encasement of pipe for a length of 10 feet to either side of the waterline.

18. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for sewer line trench backfill unless otherwise approved by the Engineer.

19. To inhibit the movement of ground water through sewer bedding and haunching material, clay cutoff wall of native material are to be constructed approximately 10 feet upstream from each manhole and shown on sanitary sewer plan and profiles.

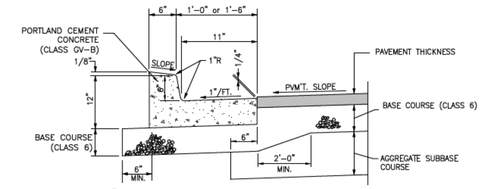
20. The contractor shall obtain a City of Grand Junction Street Cut Permit for all work within existing City right–of–way prior to construction.

LEGEND

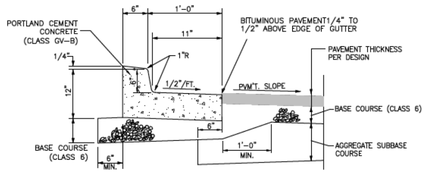
PROPERTY LINE	PROPOSED INLINE DRAIN
ADJACENT PROPERTY LINE	EXISTING 8" WATER MAIN
EXISTING EASEMENT	PROPOSED 2" DOMESTIC SERVICE
PROPOSED EASEMENT	PROPOSED 4" FIRE LINE
EXISTING BUILDING	EXISTING FIRE HYDRANT
PROPOSED BUILDING	PROPOSED FIRE HYDRANT
EXISTING CURB/GUTTER	EXISTING WATER METER
PROPOSED CURB/GUTTER	PROPOSED WATER METER
PROPOSED SPILL CURB/GUTTER	PROPOSED METER/BACKFLOW VAULT
PROPOSED TRANSITION CURB/GUTTER	PROPOSED IRRIGATION MANHOLE
EXISTING RETAINING WALL	PROPOSED FENCE
EXISTING 1–FT CONTOUR	EXISTING FENCE
EXISTING 5–FT CONTOUR	PROPOSED TRAFFIC FLOW
PROPOSED 1–FT CONTOUR	GRADE BREAK
PROPOSED 5–FT CONTOUR	ROOF DRAIN (RD)
EXISTING ASPHALT	STREET LIGHT POLE
PROPOSED ASPHALT	FIRE DEPARTMENT CONNETION
PROPOSED HEAVY DUTY ASPHALT	PARKING LOT LIGHT
EXISTING CONCRETE	PROPOSED BUILDING LIGHT
PROPOSED CONCRETE	POWER POLE
PROPOSED HEAVY DUTY CONCRETE	FLOWLINE
EXISTING SANITARY SEWER	EDGE OF PAVEMENT
PROPOSED SANITARY SEWER	TOP OF CONCRETE
EXISTING SANITARY SEWER MANHOLE	TOP OF WALL
PROPOSED SANITARY SEWER MANHOLE	BOTTOM OF WALL
PROPOSED SANITARY SEWER CLEANOUT	TOP BACK OF WALK
EXISTING STORM SEWER	TOP OF CURB
PROPOSED STORM SEWER	BACK OF CURB
EXISTING STORM SEWER INLET	LANDSCAPE AREA
PROPOSED STORM SEWER INLET	UTILITY PEDESTALS
EXISTING STORM SEWER MANHOLE	
PROPOSED STORM SEWER MANHOLE	

Revised

TYPICAL CONCRETE SECTIONS



A *STANDARD 1'–6" CURB AND GUTTER*
NOT TO SCALE



B *1'–6" SPILL CURB AND GUTTER*
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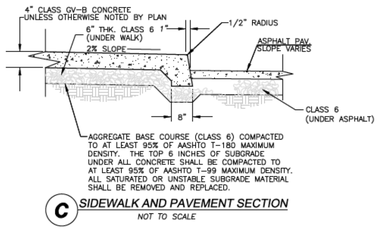
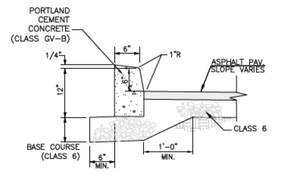
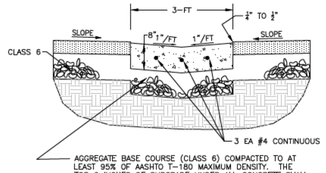


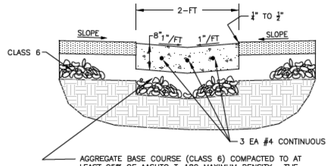
C *SIDEWALK AND PAVEMENT SECTION*
NOT TO SCALE



D *BARRIER CURB*
NOT TO SCALE



E *3' WIDE VALLEY PAN DETAIL*
NOT TO SCALE



F *2' WIDE VALLEY PAN DETAIL*
NOT TO SCALE

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Land Planning • Civil Engineering • Development Services
123 N. 7th Street, Suite 300 • Grand Junction, Colorado 81501
(970) 242-7540

COLORADO LICENSED
CHRISTINA M. BERRY
42780
4/9/15
PROFESSIONAL ENGINEER

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GENERAL NOTES AND DETAILS

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: **C-2**

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Addendum 2

M:\PROJECTS\1443\000\Orchard Mesa Fire Station\dgn\Construction Docs\PROJECT SITE - FIRE STATION #4.dwg, 4/9/2015 12:46:26 PM, DWG To PDF.pc3
STATION #4.dwg

Revised

GENERAL CONSTRUCTION NOTES

1. Locations of existing utilities shown on these plans are approximate only. Contractor is to contact affected utility for specific locations before digging.

2. The Contractor shall notify the engineer if unanticipated conditions area encountered during completion of the work which require modifications to the contract drawings. The engineer can be reached at 970–242–7540.

3. Contractor shall give 48–hour notice to all authorized inspectors, superintendents, or person in charge of public and private utilities affected by his operations prior commencement of work. Contractor shall assure himself that all construction permits are current.

4. Contractor shall confine his construction operations to the right–of–way, easements, and lots, as shown on plans and plat. Any damage to private facilities outside these limits shall be repaired by the Contractor at no expense to the Owner.

5. All road construction, related work, materials, performance and quality of work provided shall conform to the requirements of the City of Grand Junction Standard Specifications and Drawings and the applicable sections of the most current edition of the Division of Highways, State of Colorado Standard Specifications for Road and Bridge Construction, Colorado Standard Plans, Division of Highways M & S Standards.

6. Contractor shall familiarize himself with the geotechnical testing requirements of the City of Grand Junction. The results of the required types of tests and numbers of passing tests shall be furnished to the Engineer for verification before final acceptance by the Owner will be granted. All failing tests shall be brought to the immediate attention of the Engineer and retests shall be performed until passing results are obtained. All utility lines, including service lines falling shall be tested.

7. All earthwork operations shall be completed in accordance with the recommendations and requirements of the Geotechnical and Geologic Hazards Investigation Report by Huddleston–Berry, Project #00390–0003, dated November 20, 2014.

8. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for utility trench back fill unless otherwise approved by the Engineer.

9. All utility installations within the City of Grand Junction jurisdiction are to be performed in accordance with the City of Grand Junction Standard Specifications for the Construction of Underground Utilities and Standard Details.

10. All sewer lines must be tested and approved per Orchard Mesa Sanitation District requirements PRIOR to street construction. Contractor is required to notify the Owner's representative PRIOR to testing. The Owner's representative must be present to witness testing of water and sewer lines or the City will not approve the installation.

11. In the event of a descrepancy between the construction notes contained herein and the notes and details in the City of Grand Junction Standard Contract Documents for Capital Improvements Construction manual, the City's manual shall control.

12. All work within the City of Grand Junction Right–of–Way shall required a "Work in the Right–of–Way" Permit. All construction work shall be in accordance with the latest edition of the City of Grand Junction Standard Specifications.

13. All concrete shall have a minimum of 6: Class VI ABC, unless otherwise noted.

PAVING CONSTRUCTION NOTES

1. All road widths and radii are to flow line unless noted otherwise. Any "spot" design elevations are to flow line of curb and gutter unless otherwise noted.

2. Prior to pavement placement, the pavement prism should be stripped of all unsuitable materials. The subgrade soils shall be scarified to a depth of 12–inches, moisture conditioned, and recompacted to a minimum of 95% of the standard Proctor maximum dry density, within ±2% of optimum moisture as determined by AASHTO T–99.

3. Contractor to protect existing utilities and appurtenances. Manholes, drainage inlets, utility lines, etc., damaged, covered, or filled with dirt or debris by the Contractor shall be cleaned and repaired at no expense to the Owner.

4. Where proposed pavement is to match existing pavement, existing pavement is to be squared cut, full base thickness is to be brought to match line and existing surface is to be tack–coated before proposed surface is placed.

5. All handicap ramps, sidewalks and curb and gutter are to be constructed where indicated on the plans and in accordance The City of Grand Junction requirements..

6. Curb, gutter, and drainage pans are to have expansion joints at each change in horizontal alignment of curb and gutter, but in no case at a greater distance apart than 100 feet. Locate dummy grooved joints between expansion joints at intervals not exceeding 10 feet. Where length of pour precludes 10 foot intervals, the end sections may be less then 10 feet but not less than 5 feet.

7. PAVEMENT SECTION: Automobile Parking – "Hot–Mix Asphalt" 3–inch HMA over 6–inch CDOT Class 6 over 6" CDOT Class 3 over 12–inch scarified & recompacted subgrade. Truck Traffic – "Hot–Mix Asphalt" 3–inch HMA over 6–inch CDOT Class 6 over 16" CDOT Class 3 over 12–inch scarified & recompacted subgrade. "Rigid Pavement" 6–inch or 8–inch Portland Cement Concrete w/ #4 bars @ 16" cntrs., E.W. over 6–inch CDOT Class 6 over 12–inch scarified & recompacted subgrade.

Summary of Pavement Recommendations

Automobile Parking Areas
EDLA = 5, Structural Number = 2.75

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
Full Depth HMA	7.0				7.0
A	3.0	10.0			13.0
B	4.0	7.0			11.0
C	3.0	6.0	6.0		15.0
Rigid Pavement		6.0		6.0	12.0

Truck Traffic Areas
EDLA = 30, Structural Number = 3.70

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
Full Depth HMA	9.0				9.0
A	3.0	17.0			20.0
B	4.0	14.0			18.0
C	3.0	6.0	16.0		25.0
Rigid Pavement		6.0		8.0	14.0

WATER LINE CONSTRUCTION

1. All water line construction within public right–of–way or to be dedicated to the district shall be constructed in accordance with the Ute Water District Standards and Specifications.

2. Contractor shall notify the Ute Water Conservancy 24 hours prior to beginning of construction.

3. All trenches shall be compacted to 95% within 2% of optimum moisture content, as determined by AASHTO T–99. Contractor shall be required to perform all necessary compaction tests through a certified soils lab.

4. Minimum cover required over top of new waterlines is 4'–9".

5. All water mains to be DR–18 PVC, Class 150 conforming to AWWA C–900 of 909.

8. Cast Iron fittings to conform to AWWA C–110.

9. Fire Hydrants shall conform to AWWA C–502, Mueller Centurian.

10. All materials labor and equipment required for testing and disaffection of water lines shall be furnished by Contractor. Dissinfection of water lines shall conform to AWWA C–651–86 or latest revision thereof. No separate pay.

11. All pipe bends/angle points, both horizontal and vertical, as called for on the plans are to be thrust blocked per Ute Water Conservancy District details and Technical Specifications.

12. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for water line trench backfill unless otherwise approved by the Engineer.

13. All Ute Water Mains are to be bedded per City of Grand Junction Standards.

14. All water service lines shall be 200 psi rated "Pure Core" Blue HDPE, or approved equal.

STORM SEWER CONSTRUCTION NOTES

1. All storm sewer line construction shall be in accordance with the City of Grand Junction Standards and Specifications.

2. All Reinforced Concrete storm sewer pipe shall conform to ASTM Standard Specifications, C–76, Class III unless otherwise noted.

3. All polyvinyl chloride (PVC) pipe and fittings shall conform to ASTM Standard Specifications, D3034 and F679, SDR–35 unless otherwise noted.

4. All High Density Polyethylene (HDPE) pipe and fittings shall be smooth bore and shall conform to the following:
12 inch to 36 inch shall meet ASSHTO M294
42 inch to 48 inch shall meet ASSHTO MP6
All HDPE pipe up to 30" shall be backfilled to springline with Class–6.

FUGITIVE DUST CONTROL PLAN

1. Before stripping of the site preparation for overlot grading, the surface is to be pre–wet to control dust.

2. Any stockpiles of stripping materials are to be periodically sprayed with water or a crusting agent to stabilize potentially wind blown material.

3. Haul road both into and around the site are to be sprayed as needed to suppress dust.

4. The Storm Water Management Plan and permit shall be obtained and kept onsite before starting any construction work. Gravel pads are to be constructed at the entrances to the site to help in removing mud from the wheels of haulage trucks before they enter onto City streets.

5. Trucks hauling import fill are to be tarped to aid in the control of airborne dust.

ORCHARD MESA SANITATION DISTRICT NOTES

1. All sewer line construction shall conform to Orchard Mesa Sanitation District's Standards and Specifications.

2. All materials and workmanship shall be subject to inspection by the District. The District reserves the right to reject any materials and workmanship that does not conform to the Standards and Specifications.

3. The Contractor shall have one signed copy of the Plans and a copy of the District's Standards and Specifications at the job site at all times.

4. All sanitary sewer pipe shall be PVC SDR–35 unless otherwise specified. All pipe joints shall be 13 foot joints unless otherwise approved by the District Engineer.

5. All sewer mains shall be laid to grade utilizing a pipe laser.

6. All service line connections to the new main shall be accomplished with full body wyes or tees. Tapping saddles will not be allowed.

7. All trenches shall be compacted to 90% within 2% of optimum moisture content, as determined AASHTO T–180. Contractor shall be required to perform all necessary compaction tests through a certified soils lab. A copy of the compaction test results shall be provided to the District during the course of the project.

8. A minimum 10–foot separation shall be maintained at all times between waterlines and sewer lines (except at specified crossings).

9. All sanitary sewer services to be 4" PVC SDR 35 unless otherwise specified.

10. Sewer service stub–outs shall extend 14 feet beyond the property line and shall be glue–capped and marked with a 2x4 post painted green.

11. The Contractor shall notify the District at least 48 hours prior to commencement of construction.

12. Manholes shall be constructed as shown on the Orchard Mesa Sanitation District Standard Sanitary Sewer Detail sheet. At the District's direction, the Contractor shall field vacuum test manholes to ensure that they are of watertight construction and that manholes have not been damaged during installation.

13. No service lines shall be connected directly into manholes.

14. Manhole cone and flat top sections shall be positioned such that the manhole ring and cover are offset 20 degrees to 30 degrees from the upstream main sewer line into the manhole. Manhole steps shall be installed in vertical alignment with the ring and cover.

15. Steel paving rings are not allowed for grade adjustment unless otherwise approved by the District.

16. The Contractor is responsible for all required sewer line testing to be completed in the presence of the District Engineer or their representative. Final testing is to be accomplished only after all other infrastructure has been installed. This includes waterlines, gas lines, electric lines, etc. Testing will be performed after all compaction of street subgrade and prior to street paving. Final lamping will also be accomplished after paving is completed to insure that the line is clean. These tests will be the basis for issuing Initial Acceptance of the sewer line extension.

17. Where sanitary sewers cross under a water line with less than 18 inches of vertical separation, and in all cases where the sanitary sewer crosses over the waterline at any depth, provide total concrete encasement of pipe for a length of 10 feet to either side of the waterline.

18. Only materials on which a proctor test can be performed and accurate nuclear density tests can be run are approved for sewer line trench backfill unless otherwise approved by the Engineer.

19. To inhibit the movement of ground water through sewer bedding and haunching material, clay cutoff wall of native material are to be constructed approximately 10 feet upstream from each manhole and shown on sanitary sewer plan and profiles.

20. The contractor shall obtain a City of Grand Junction Street Cut Permit for all work within existing City right–of–way prior to construction.

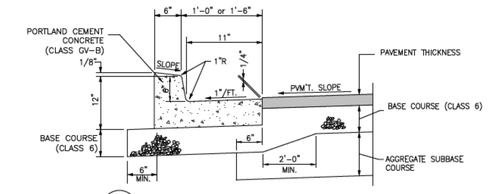
LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CURB/GUTTER
- PROPOSED CURB/GUTTER
- PROPOSED SPILL CURB/GUTTER
- PROPOSED TRANSITION CURB/GUTTER
- EXISTING RETAINING WALL
- EXISTING 1–FT CONTOUR
- EXISTING 5–FT CONTOUR
- PROPOSED 1–FT CONTOUR
- PROPOSED 5–FT CONTOUR
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED HEAVY DUTY ASPHALT
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED HEAVY DUTY CONCRETE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER INLET
- PROPOSED STORM SEWER INLET
- EXISTING STORM SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- PROPOSED INLINE DRAIN
- EXISTING 8" WATER MAIN
- PROPOSED 2" DOMESTIC SERVICE
- PROPOSED 4" FIRE LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER METER
- PROPOSED WATER METER
- PROPOSED METER/BACKFLOW VAULT
- PROPOSED IRRIGATION MANHOLE
- PROPOSED FENCE
- EXISTING FENCE
- PROPOSED TRAFFIC FLOW
- GRADE BREAK
- ROOF DRAIN (RD)
- STREET LIGHT POLE
- FIRE DEPARTMENT CONNETION
- PARKING LOT LIGHT
- PROPOSED BUILDING LIGHT
- POWER POLE
- FL FLOWLINE
- EOP EDGE OF PAVEMENT
- TOC TOP OF CONCRETE
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- TBW TOP BACK OF WALK
- TC TOP OF CURB
- BOC BACK OF CURB
- LS LANDSCAPE AREA
- UTILITY PEDESTALS

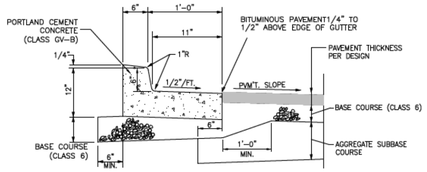
UTILITIES AND AGENCIES

ORCHARD MESA SANITATION DISTRICT	STEVE LABONDE	241–7076
UTE WATER	JIM DAUGHETY	242–7491
GRAND VALLEY IRRIGATION	PHIL BERTRAND	242–2762
CITY OF GRAND JUNCTION PUBLIC WORKS	MARK BARSLAND	256–4106
XCEL ENERGY	JOHN PRICE	244–2693
CENTURY LINK	CHRIS JOHNSON	244–4311
BRESNAN COMMUNICATIONS	JOHN VALDEZ	245–8750

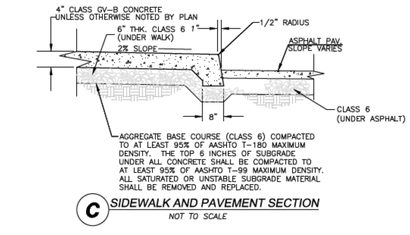
TYPICAL CONCRETE SECTIONS



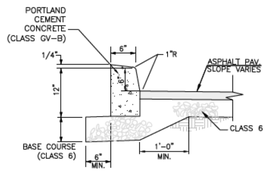
A STANDARD 1'–6" CURB AND GUTTER
NOT TO SCALE



B 1'–6" SPILL CURB AND GUTTER
NOT TO SCALE



C SIDEWALK AND PAVEMENT SECTION
NOT TO SCALE



D BARRIER CURB
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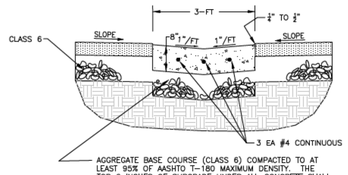

E 3' WIDE VALLEY PAN DETAIL
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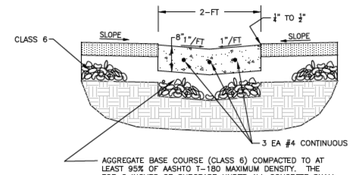

F 2' WIDE VALLEY PAN DETAIL
NOT TO SCALE

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(970) 242-7540

COLORADO LICENSED STEPHEN J. AUSTIN 32780 PROFESSIONAL ENGINEER 4/10/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GENERAL NOTES AND DETAILS

NO:	ISSUED FOR:	DATE:
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△		
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△		
△		
△		
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△		
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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-2

PROJECT NO: 1443

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12/5/2014 3:30:03 PM
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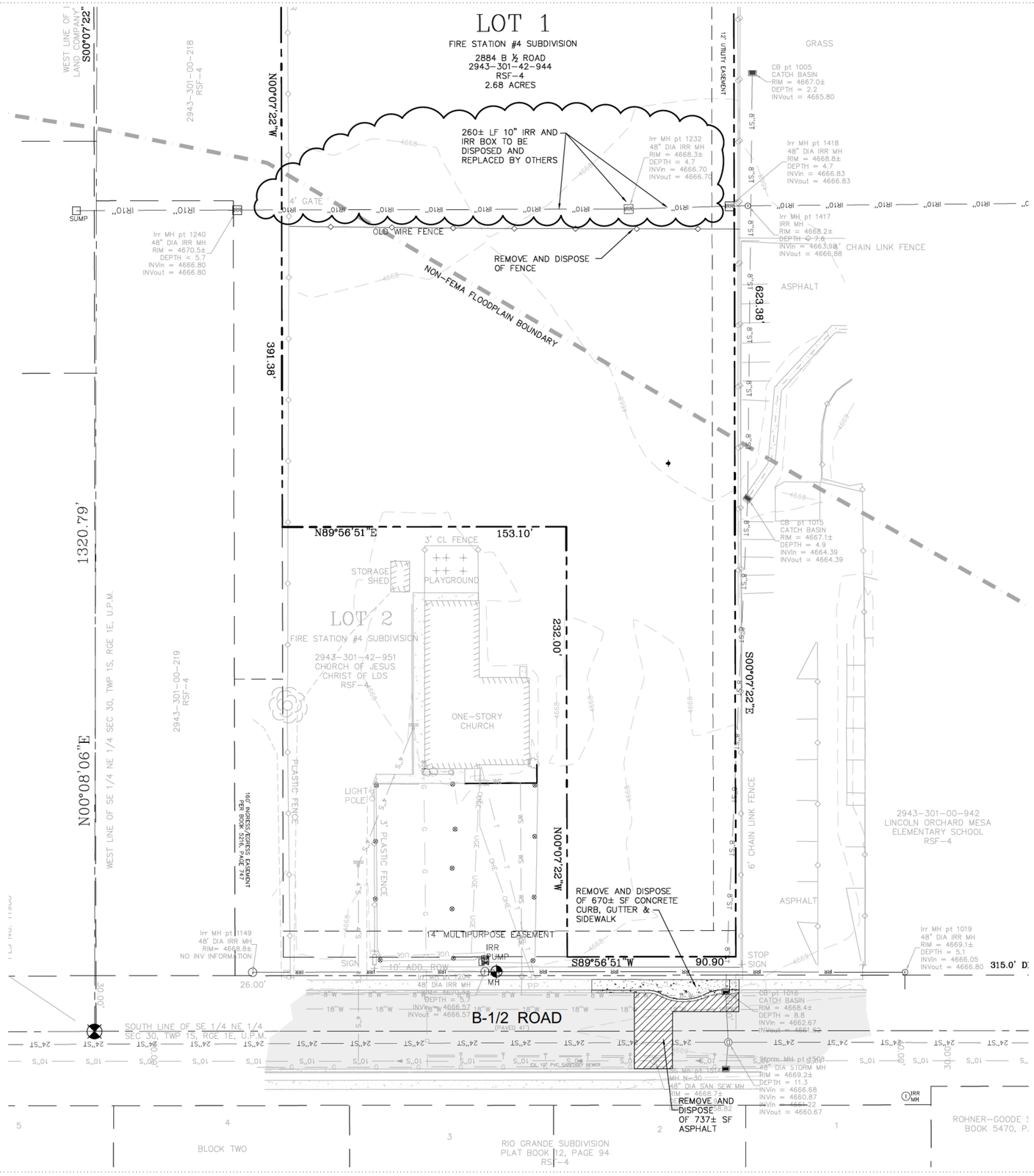

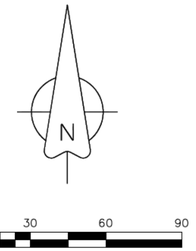

NOTE:

1. OBTAIN WORK IN RIGHT OF WAY PERMITS FROM THE CITY OF GRAND JUNCTION BEFORE DOING ANY WORK ALONG B 1/2 ROAD.

BENCHMARK

60D NAIL
N: 26287.81
E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

CITY OF GRAND JUNCTION ENGINEERING

APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

BY: _____ *DATE:* _____

ACCEPTED AS CONSTRUCTED

BY: _____ *DATE:* _____

"All details, construction, inspections, and testing shall conform to the City of Grand Junction Standard Contract Documents for Capital Improvements Construction. Contractor shall have a copy of the accepted plans and current City of Grand Junction Standard Documents for Capital improvements Construction on site and available at all times."

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

DEMOLITION PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	IRR, DRAINAGE & FIRE LINE	6-11-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO:

PROJECT NO: 1443

C-3

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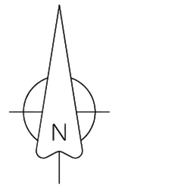
PR 03

Revised

LOT 1
FIRE STATION #4 SUBDIVISION
2884 B ½ ROAD
2943-301-42-944
RSF-4
2.68 ACRES

WEST LINE OF LAND COMPANY
S00°07'22"E
1320.76'
N00°08'06"E
WEST LINE OF SE 1/4 NE 1/4 SEC 30, TWP 1S, RGE 1E, U.P.M.
2943-301-00-218
RSF-4
2943-301-00-219
RSF-4
N00°07'22"W
391.38'
623.38'
232.00'
S00°07'22"E
N00°07'22"W
12' UTILITY EASEMENT
GRASS
CB pt 1005
CATCH BASIN
RIM = 4667.0±
DEPTH = 4.2
INVout = 4665.80
Irr MH pt 1232
48" DIA IRR MH
RIM = 4668.3±
DEPTH = 4.7
INVin = 4666.70
INVout = 4666.70
Irr MH pt 1417
IRR MH
RIM = 4668.2±
DEPTH = 7.6
INVin = 4663.98
INVout = 4666.88
6' CHAIN LINK FENCE
ASPHALT
4' GATE
SUMP
OLD WIRE FENCE
REMOVE AND DISPOSE OF FENCE
NON-FEMA FLOODPLAIN BOUNDARY
Irr MH pt 1240
48" DIA IRR MH
RIM = 4670.5±
DEPTH = 5.7
INVin = 4666.80
INVout = 4666.80
N89°56'51"E
153.10'
3' CL FENCE
STORAGE SHED
PLAYGROUND
LOT 2
FIRE STATION #4 SUBDIVISION
2943-301-42-951
CHURCH OF JESUS CHRIST OF LDS
RSF-4
ONE-STORY CHURCH
LIGHT POLE
3' PLASTIC FENCE
PLASTIC FENCE
160' INGRESS/EGRESS EASEMENT PER BOOK 5216, PAGE 747
14' MULTIPURPOSE EASEMENT
Irr MH pt 1149
48" DIA IRR MH
RIM= 4668.8±
NO INV INFORMATION
SIGN
10' ADD. ROW
IRR PUMP MH
26.00'
REMOVE AND DISPOSE OF 670± SF CONCRETE CURB, GUTTER & SIDEWALK
S89°56'51"W
90.90'
STOP SIGN
2943-301-00-942
LINCOLN ORCHARD MESA ELEMENTARY SCHOOL
RSF-4
ASPHALT
Irr MH pt 1019
48" DIA IRR MH
RIM = 4669.1±
DEPTH = 5.1
INVin = 4666.05
INVout = 4666.80
315.0' D
B-1/2 ROAD
(PAVED 41')
SOUTH LINE OF SE 1/4 NE 1/4 SEC 30, TWP 1S, RGE 1E, U.P.M.
CB pt 1018
CATCH BASIN
RIM = 4668.4±
DEPTH = 8.8
INVin = 4662.67
INVout = 4661.52
S Storm MH pt 1508
48" DIA STORM MH
RIM = 4669.2±
DEPTH = 11.3
INVin = 4666.68
INVin = 4660.87
INVin = 4660.22
INVout = 4660.67
SS MH pt 1514
48" DIA SAN SEW MH
RIM = 4668.7±
DEPTH = 11.9
INVout = 4658.82
REMOVE AND DISPOSE OF 737± SF ASPHALT
IRR MH
BLOCK TWO
RIO GRANDE SUBDIVISION
PLAT BOOK 12, PAGE 94
RSF-4
ROHNER-GOODE S
BOOK 5470, P.



0 30 60 90

NOTE:

1. OBTAIN WORK IN RIGHT OF WAY PERMITS FROM THE CITY OF GRAND JUNCTION BEFORE DOING ANY WORK ALONG B 1/2 ROAD.

BENCHMARK

60D NAIL
N: 26287.81
E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

CITY OF GRAND JUNCTION ENGINEERING

APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

BY:_____ DATE:_____

ACCEPTED AS CONSTRUCTED

BY:_____ DATE:_____

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(970) 242-7540

COLORADO LICENSED CHRISTOPHER M. BUSH 42780 PROFESSIONAL ENGINEER 4/29/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

DEMOLITION PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15 SHEET NO: C-3

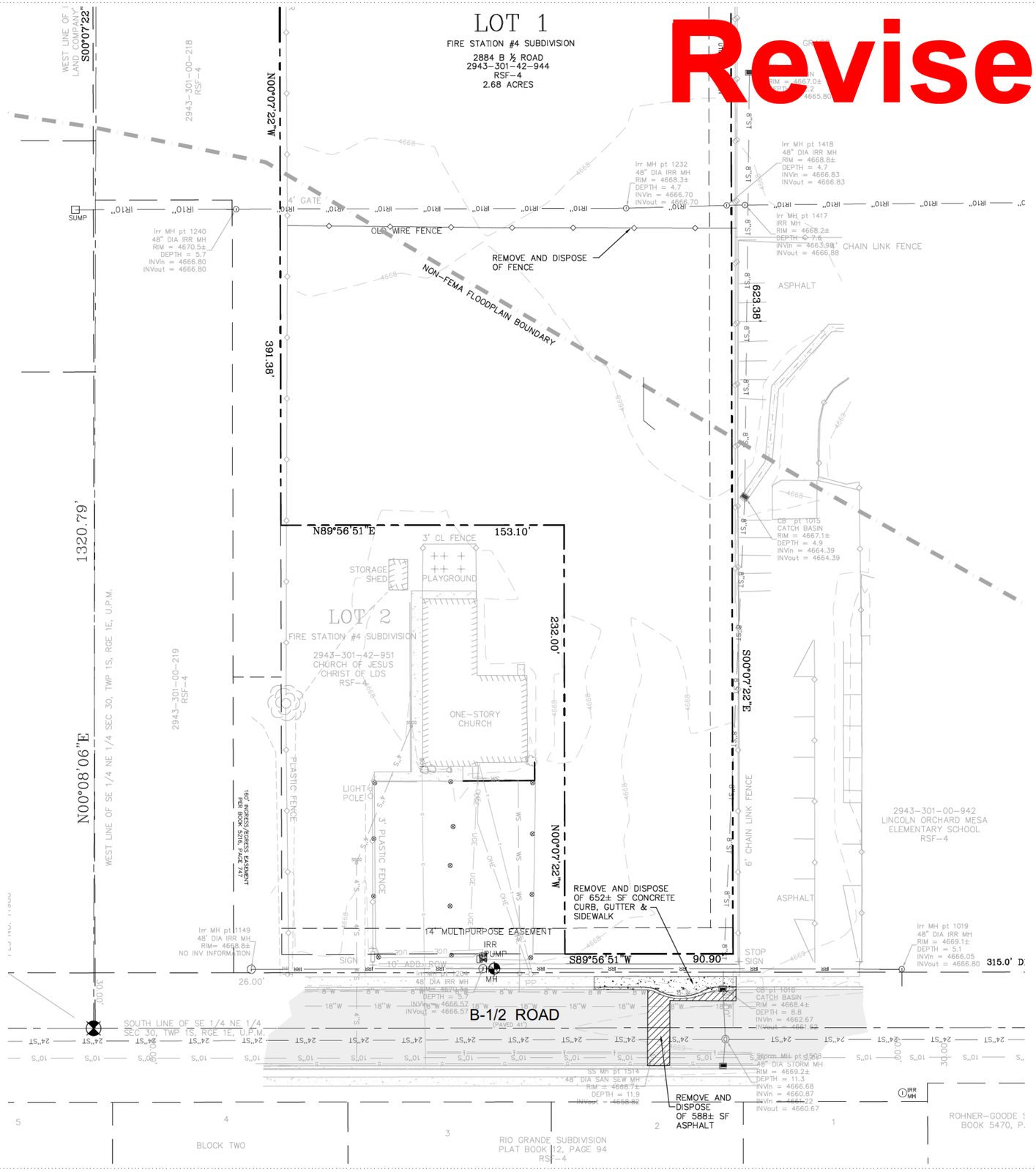
PROJECT NO: 1443

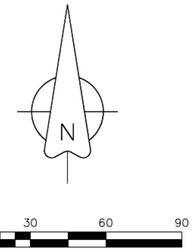
©2012 CHAMBERLIN ARCHITECTS

Addendum 2

12/1/2014 3:32:16 PM

Revised





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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

DEMOLITION PLAN

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15 SHEET NO:

PROJECT NO: 1443 **C-3**

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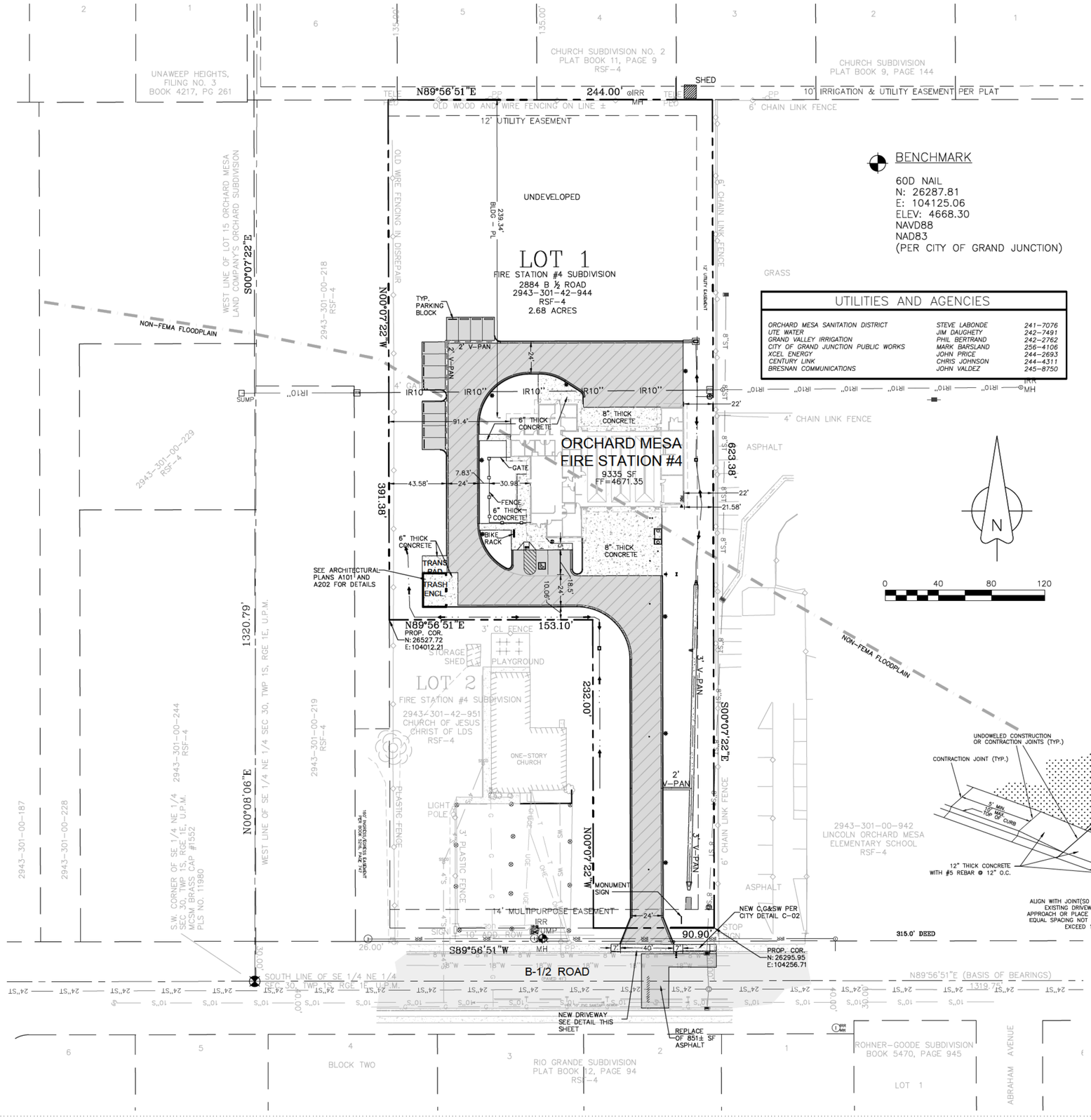
M:\PROJECTS\1519.005 Orchard Mesa Fire Station\Dwg\CAD\Production Dwg\PROD SITE - FIRE STATION #4.dwg, 4/7/2015 1:50:01 PM, DWG To PDF.pc3



BENCHMARK

60D NAIL
N: 26287.81
E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

UTILITIES AND AGENCIES

ORCHARD MESA SANITATION DISTRICT	STEVE LABONDE	241-7076
UTE WATER	JIM DAUGHETY	242-7491
GRAND VALLEY IRRIGATION	PHIL BERTRAND	242-2762
CITY OF GRAND JUNCTION PUBLIC WORKS	MARK BARSLAND	256-4106
XCEL ENERGY	JOHN PRICE	244-2693
CENTURY LINK	CHRIS JOHNSON	244-4311
BRESNAN COMMUNICATIONS	JOHN VALDEZ	245-8750

GENERAL NOTES:

1. ALL PARKING SPACES ARE 9-FT WIDE X 18.5-FT LONG UNLESS OTHERWISE NOTED.
2. ALL SIDEWALKS ARE 4' WIDE UNLESS OTHERWISE NOTED.
3. OBTAIN WORK IN RIGHT OF WAY PERMITS FROM THE CITY OF GRAND JUNCTION BEFORE DOING ANY WORK ALONG B 1/2 ROAD.
4. AS SHOWN BY PLAN VIEW, THE PROJECT SITE IS LOCATED WITHIN A NON-FEMA 100-YEAR FLOODPLAIN BOUNDARY ACCORDING TO THE "ORCHARD MESA FLOOD HAZARD MITIGATION REPORT", DATED JULY 2009, AND PREPARED BY AYRES ASSOCIATES. THE REPORT IDENTIFIES A 100-YEAR WATER SURFACE ELEVATION OF APPROXIMATELY 4669.35 (NAVD88) NEAR THE CENTER OF THE SITE, WHICH SHALL BE USED AS THE FLOODPLAIN ELEVATION.

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CURB/GUTTER
- PROPOSED CURB/GUTTER
- PROPOSED SPILL CURB/GUTTER
- PROPOSED TRANSITION CURB/GUTTER
- EXISTING RETAINING WALL
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- PROPOSED 1-FT CONTOUR
- PROPOSED 5-FT CONTOUR
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- PROPOSED HEAVY DUTY ASPHALT
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED HEAVY DUTY CONCRETE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER MANHOLE
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- PROPOSED STORM SEWER MANHOLE
- PROPOSED INLINE DRAIN
- EXISTING 8" WATER MAIN
- PROPOSED 2" DOMESTIC SERVICE
- PROPOSED 4" FIRE LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER METER
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- PROPOSED METER/BACKFLOW VAULT
- PROPOSED IRRIGATION MANHOLE
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- GRADE BREAK
- ROOF DRAIN (RD)
- STREET LIGHT POLE
- FIRE DEPARTMENT CONNETION
- PARKING LOT LIGHT
- PROPOSED BUILDING LIGHT
- POWER POLE
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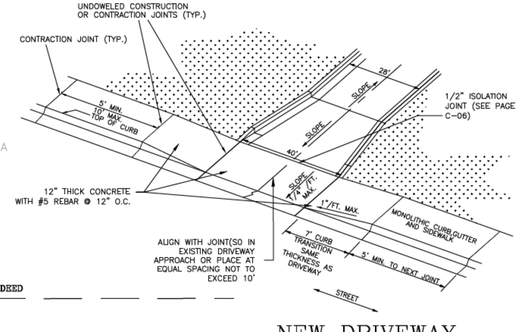
- EOP EDGE OF PAVEMENT
- TOC TOP OF CONCRETE
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- TBW TOP BACK OF WALK
- TC TOP OF CURB
- BOC BACK OF CURB
- LS LANDSCAPE AREA
- UTILITY PEDESTALS

LAND USE SUMMARY

USE	SQUARE FT	PERCENT
BUILDINGS	9,335	8.0%
LANDSCAPE/OPEN	72,001	61.8%
ASPHALT/PKG/CONC	32,809	28.1%
ROW DEDICATION	2,440	2.1%
TOTAL	116,585	100.0%

PARKING SUMMARY
Fire Station: 1/Employee (6/Shift) + 1/300SF @ 1722sf Office Space=12 spaces
Total Parking Required = 12 Spaces
Total Parking Provided On Site = 14 Spaces



NEW DRIVEWAY
NTS

CITY OF GRAND JUNCTION COMMUNITY DEVELOPMENT
BY: DATE:

CITY OF GRAND JUNCTION ENGINEERING
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SITE PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	BUILDING FOOTPRINT	5-29-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-4

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PR 03

Revised

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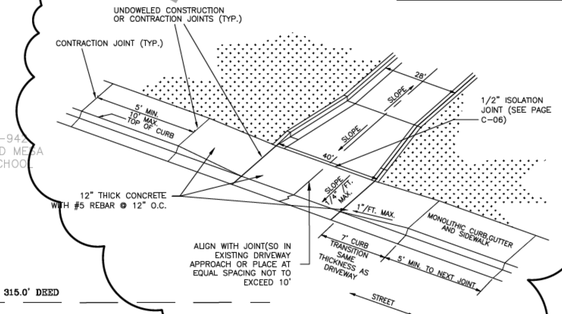

NEW DRIVEWAY
NTS

CITY OF GRAND JUNCTION COMMUNITY DEVELOPMENT
BY: _____ DATE: _____

CITY OF GRAND JUNCTION ENGINEERING
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
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COLORADO LICENSED THOMAS R. AUSTIN 42780 4/29/15 PROFESSIONAL ENGINEER

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SITE PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-4

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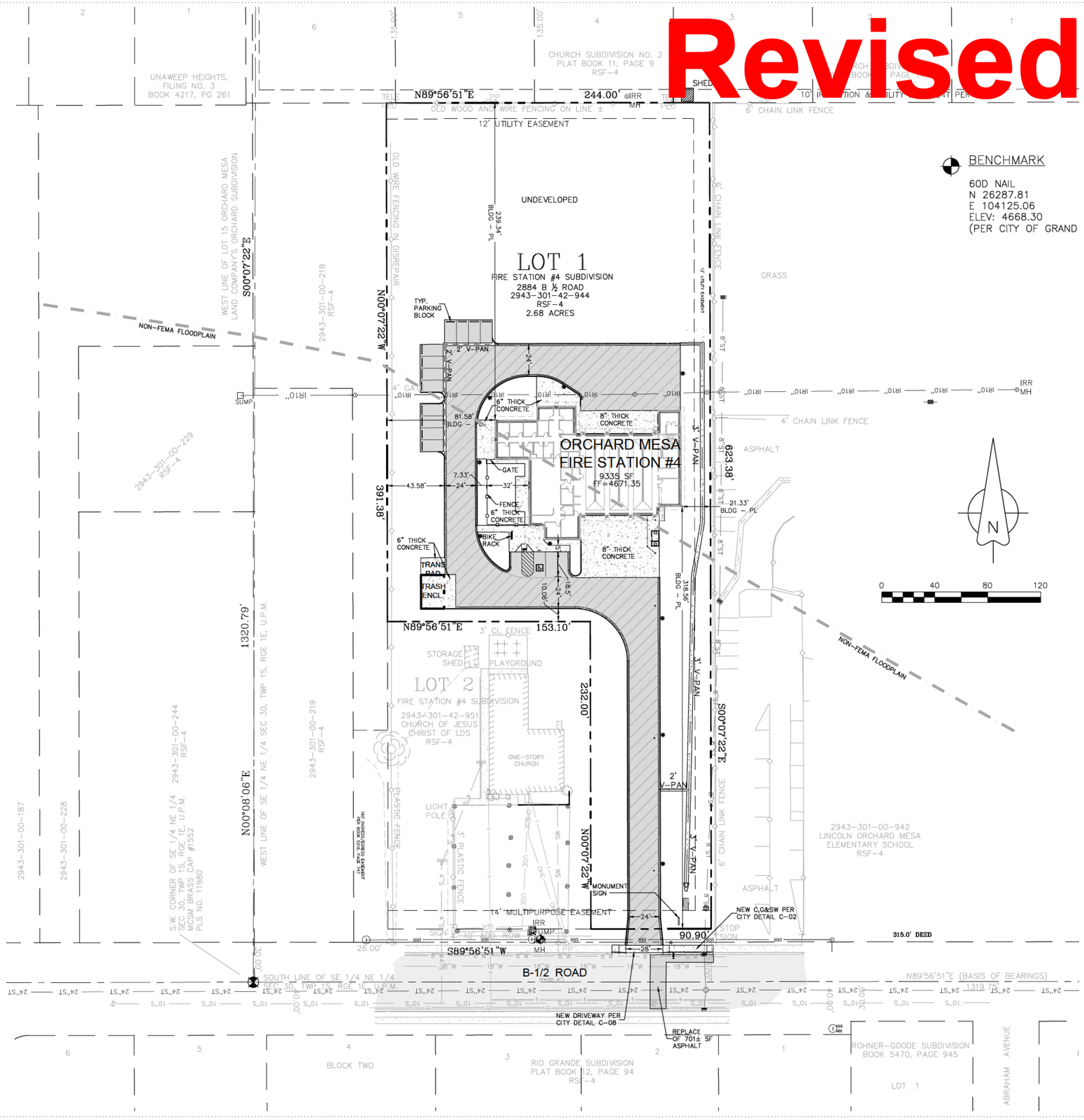
Addendum 2

Revised



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PARKING SUMMARY

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Total Parking Required = 14 Spaces

Total Parking Provided On Site = 14 Spaces

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COLORADO LICENSED PROFESSIONAL ENGINEER 42780 4/10/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SITE PLAN

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15 SHEET NO: C-4

PROJECT NO: 1443

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12/1/2014 3:39:42 PM
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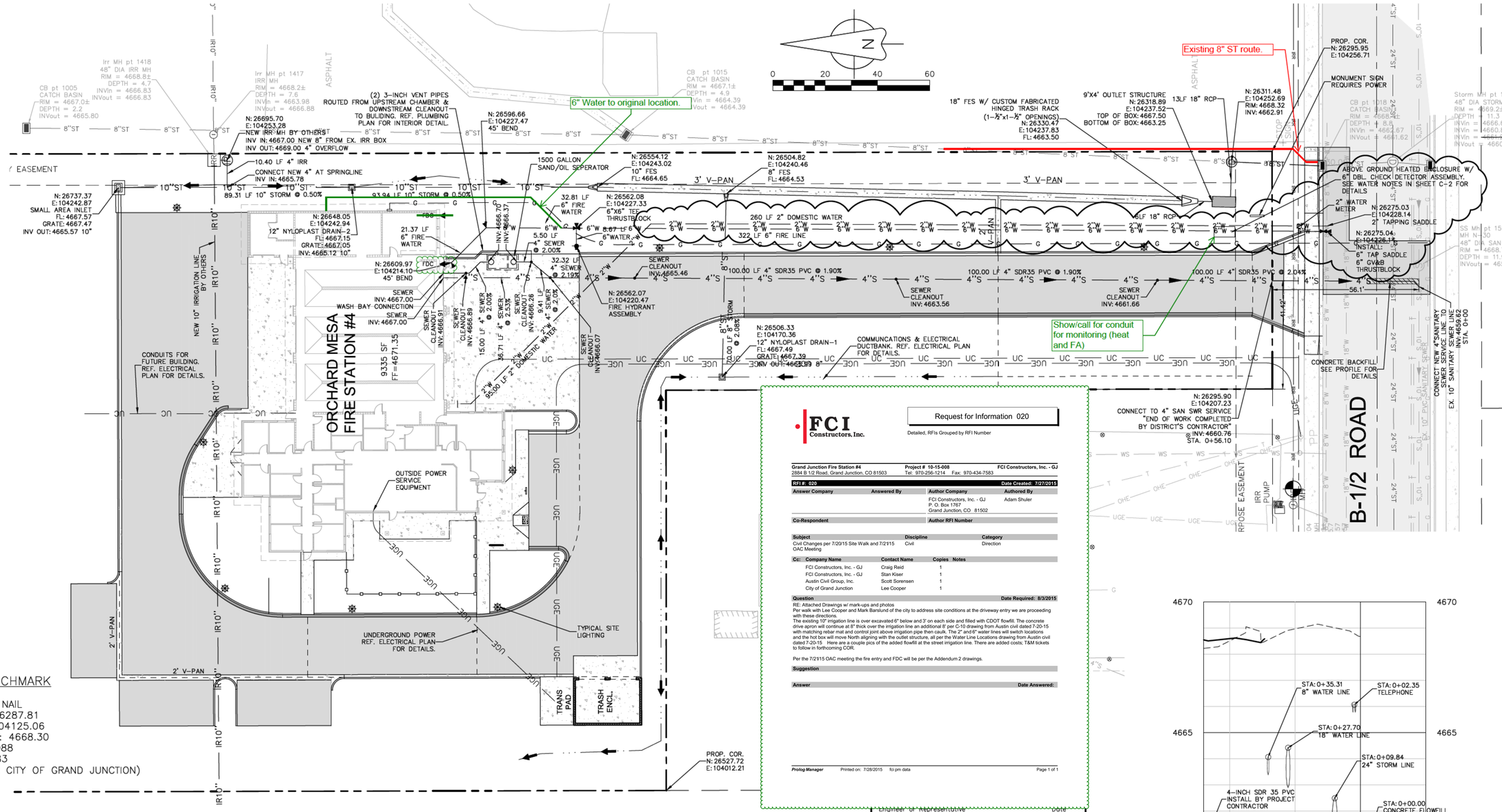

NOTE:

1. OBTAIN WORK IN RIGHT OF WAY PERMITS FROM THE CITY OF GRAND JUNCTION BEFORE DOING ANY WORK ALONG B 1/2 ROAD.

2. ALL SEWER CLEANOUTS LOCATED WITHIN TRAVELED DRIVEWAYS SHALL BE PROVIDED WITH TRAFFIC RATED RING & COVERS.

UTILITIES AND AGENCIES

ORCHARD MESA SANITATION DISTRICT	STEVE LABONDE	241-7076
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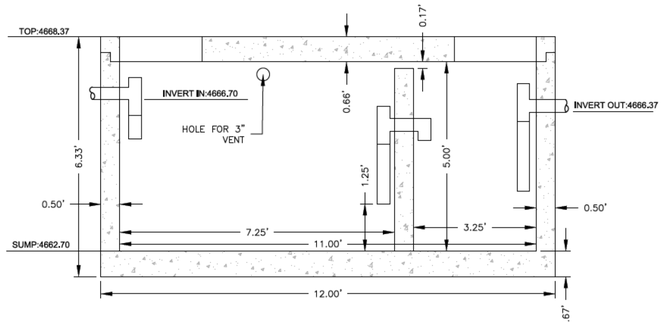

1,500 GAL. SAND/OIL SEPERATOR

NTS

FCI Constructors, Inc.

Request for Information 020

Detailed, RFIs Grouped by RFI Number

Grand Junction Fire Station #4	**Project # 10-15-008**	**FCI Constructors, Inc. - GJ**
2884 B 1/2 Road, Grand Junction, CO 81503	Tel: 970-256-1214 Fax: 970-434-7583	

RFI #: 020 — **Date Created: 7/27/2015**

Answer Company	Answered By	Author Company	Authored By
		FCI Constructors, Inc. - GJ P. O. Box 1767 Grand Junction, CO 81502	Adam Shuler

Co-Respondent — **Author RFI Number**

Subject	Discipline	Category
Civil Changes per 7/20/15 Site Walk and 7/2/15 OAC Meeting	Civil	Direction

Cc:	Company Name	Contact Name	Copies	Notes
	FCI Constructors, Inc. - GJ	Craig Reid	1	
	FCI Constructors, Inc. - GJ	Stan Kiser	1	
	Austin Civil Group, Inc.	Scott Sorensen	1	
	City of Grand Junction	Lee Cooper	1	

Question — **Date Required: 8/3/2015**

RE: Attached Drawings w/ mark-ups and photos
Per walk with Lee Cooper and Mark Barslund of the city to address site conditions at the driveway entry we are proceeding with these directions.
The existing 10" irrigation line is over excavated 6" below and 3' on each side and filled with CDOT flowfill. The concrete drive apron will continue all 8" thick over the irrigation line an additional 8' per C-10 drawing from Austin civil dated 7-20-15 with matching rebar mat and control joint above irrigation pipe then caulk. The 2" and 6" water lines will switch locations and the hot box will move North aligning with the outlet structure, all per the Water Line Locations drawing from Austin civil dated 7-20-15 Here are a couple pics of the added flowfill at the street irrigation line. There are added costs; T&M tickets to follow in forthcoming COR.

Per the 7/2/15 OAC meeting the fire entry and FDC will be per the Addendum 2 drawings.

Suggestion

Answer — **Date Answered:**

Prolog Manager Printed on: 7/28/2015 fci pm data Page 1 of 1

Engineer or Representative — Date

UTE WATER DISTRICT
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
BY: _____ DATE: _____
ACCEPTED AS CONSTRUCTED
BY: _____ DATE: _____

CITY OF GRAND JUNCTION ENGINEERING
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
BY: _____ DATE: _____
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BY: _____ DATE: _____

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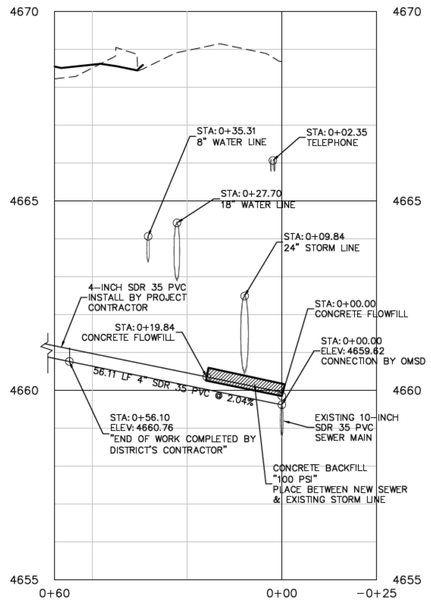

4-INCH SEWER SERVICE
HORIZONTAL: 1"=20', VERTICAL: 1"=2'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	REVISED SANITARY SEWER SERVICE	5-7-15
3	REVIEW COMMENTS RD#2	6-3-15
4	IRR, DRAINAGE & FIRE LINE	6-11-15
5	WATER LINE & ENCLOSURE	7-20-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-5

PROJECT NO: 1443

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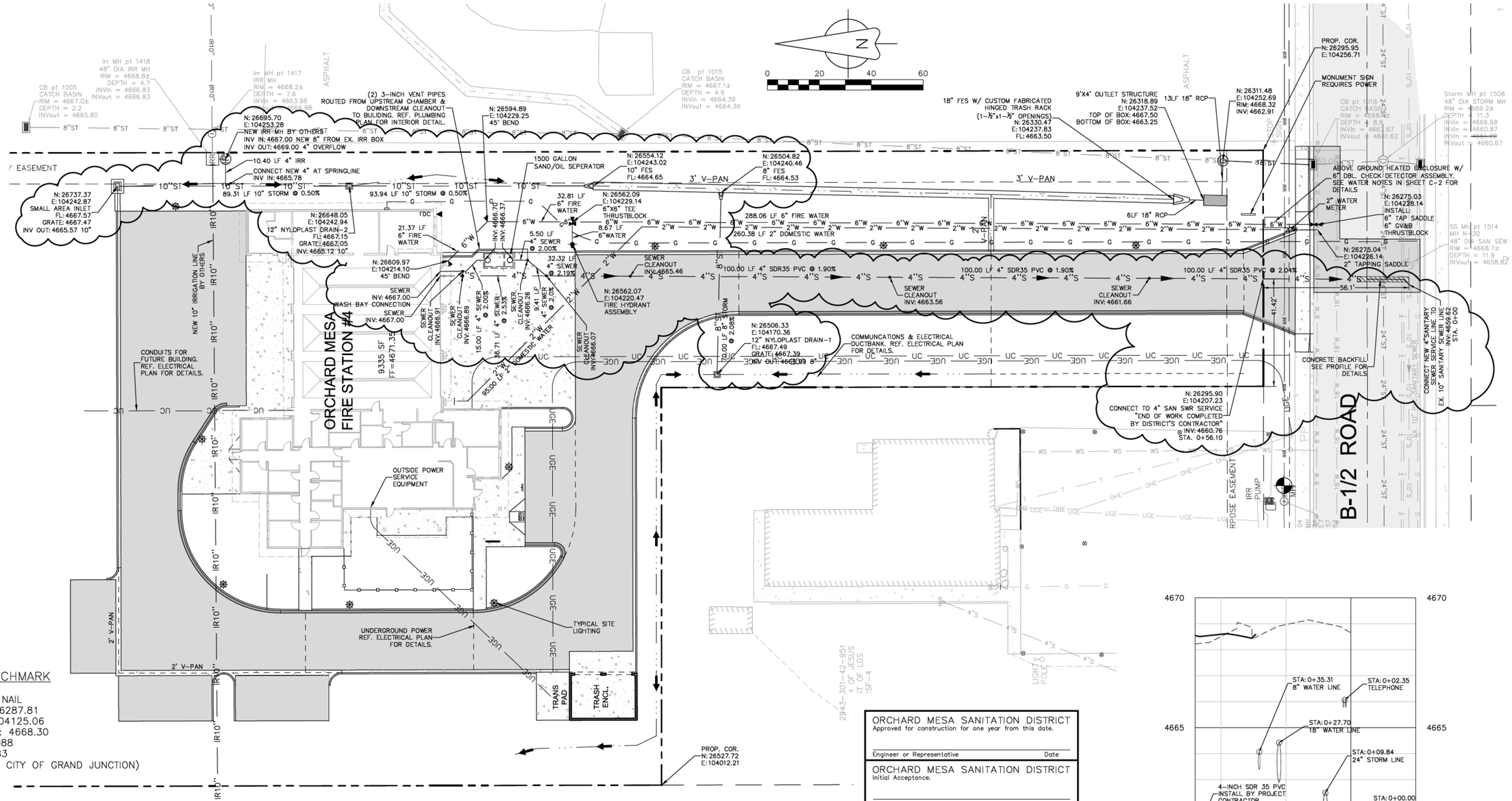
RFI 020

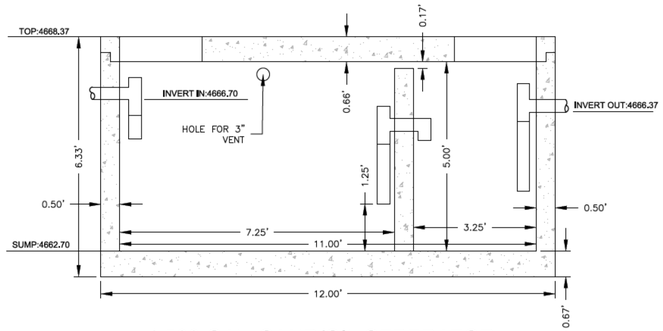


NOTE:

1. OBTAIN WORK IN RIGHT OF WAY PERMITS FROM THE CITY OF GRAND JUNCTION BEFORE DOING ANY WORK ALONG B 1/2 ROAD.

2. ALL SEWER CLEANOUTS LOCATED WITHIN TRAVELED DRIVEWAYS SHALL BE PROVIDED WITH TRAFFIC RATED RING & COVERS.

UTILITIES AND AGENCIES		
ORCHARD MESA SANITATION DISTRICT	STEVE LABONDE	241-7076
UTE WATER	JIM DAUGHETY	242-7491
GRAND VALLEY IRRIGATION	PHIL BERTRAND	242-2762
CITY OF GRAND JUNCTION PUBLIC WORKS	MARK BARSLAND	256-4106
XCEL ENERGY	JOHN PRICE	244-2693
CENTURY LINK	CHRIS JOHNSON	244-4311
BRESNAN COMMUNICATIONS	JOHN VALDEZ	245-8750



1,500 GAL. SAND/OIL SEPERATOR

NTS

ORCHARD MESA SANITATION DISTRICT
Approved for construction for one year from this date.

Engineer or Representative Date

ORCHARD MESA SANITATION DISTRICT
Initial Acceptance.

Engineer or Representative Date

UTE WATER DISTRICT
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
BY: DATE:
ACCEPTED AS CONSTRUCTED
BY: DATE:

CITY OF GRAND JUNCTION ENGINEERING
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BY: DATE:

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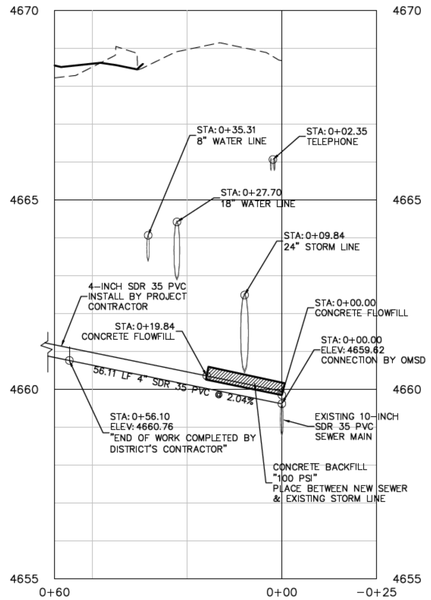

4-INCH SEWER SERVICE
HORIZONTAL: 1"=20', VERTICAL: 1"=2'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY PLAN

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2	REVISED SANITARY SEWER SERVICE	5-7-15
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4	IRR, DRAINAGE & FIRE LINE	6-11-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO:

PROJECT NO: 1443

C-5

PR 03

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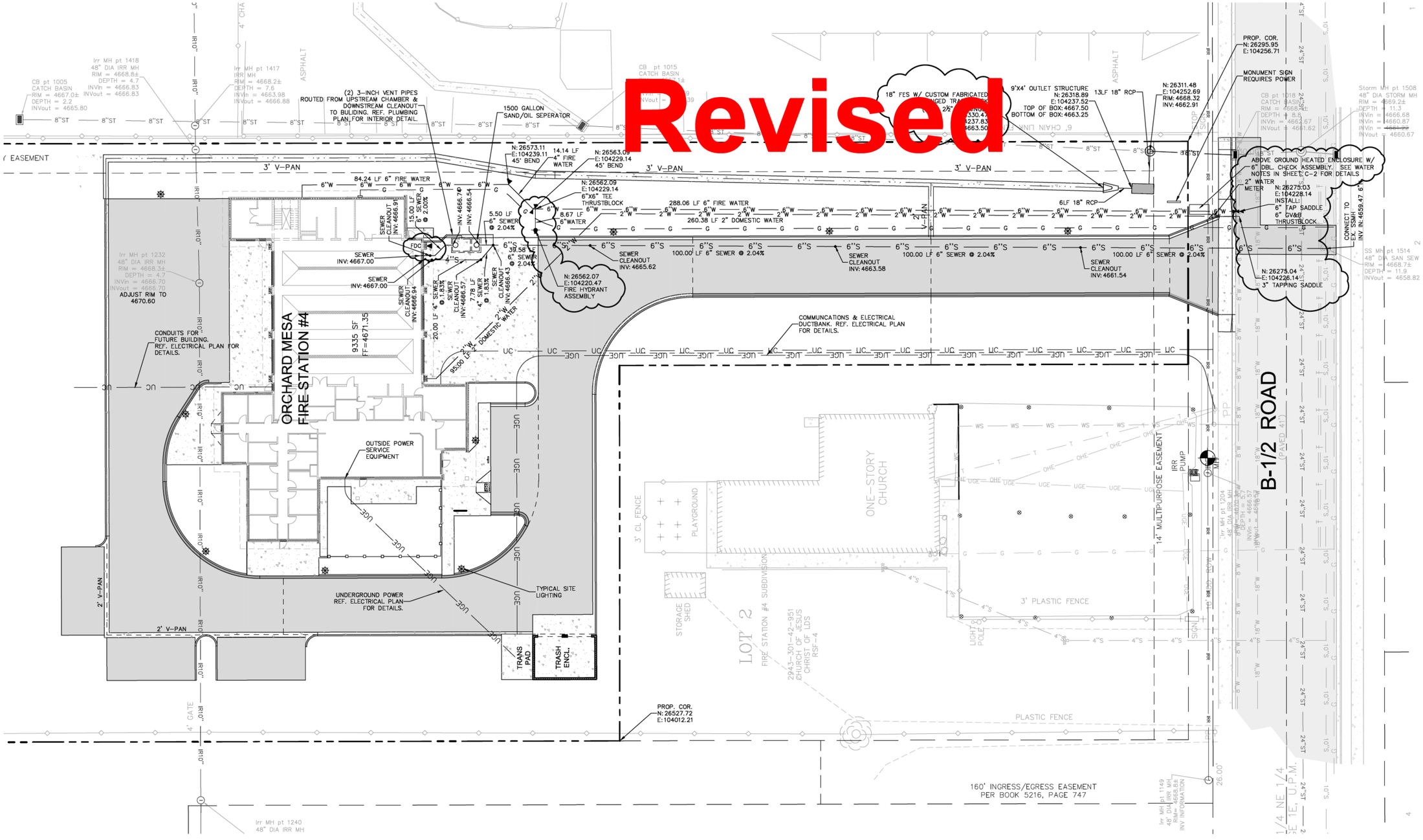

NOTE:

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BENCHMARK

60D NAIL
N: 26287.81
E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

0 20 40 60

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BRESNAN COMMUNICATIONS	JOHN VALDEZ	245-8750

UTE WATER DISTRICT	CITY OF GRAND JUNCTION ENGINEERING
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COLORADO LICENSED JASON THOMAS POWELL PROFESSIONAL ENGINEER 42780 4/29/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY PLAN

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-5

PROJECT NO: 1443

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Addendum 2

12/1/2014 3:35:22 PM
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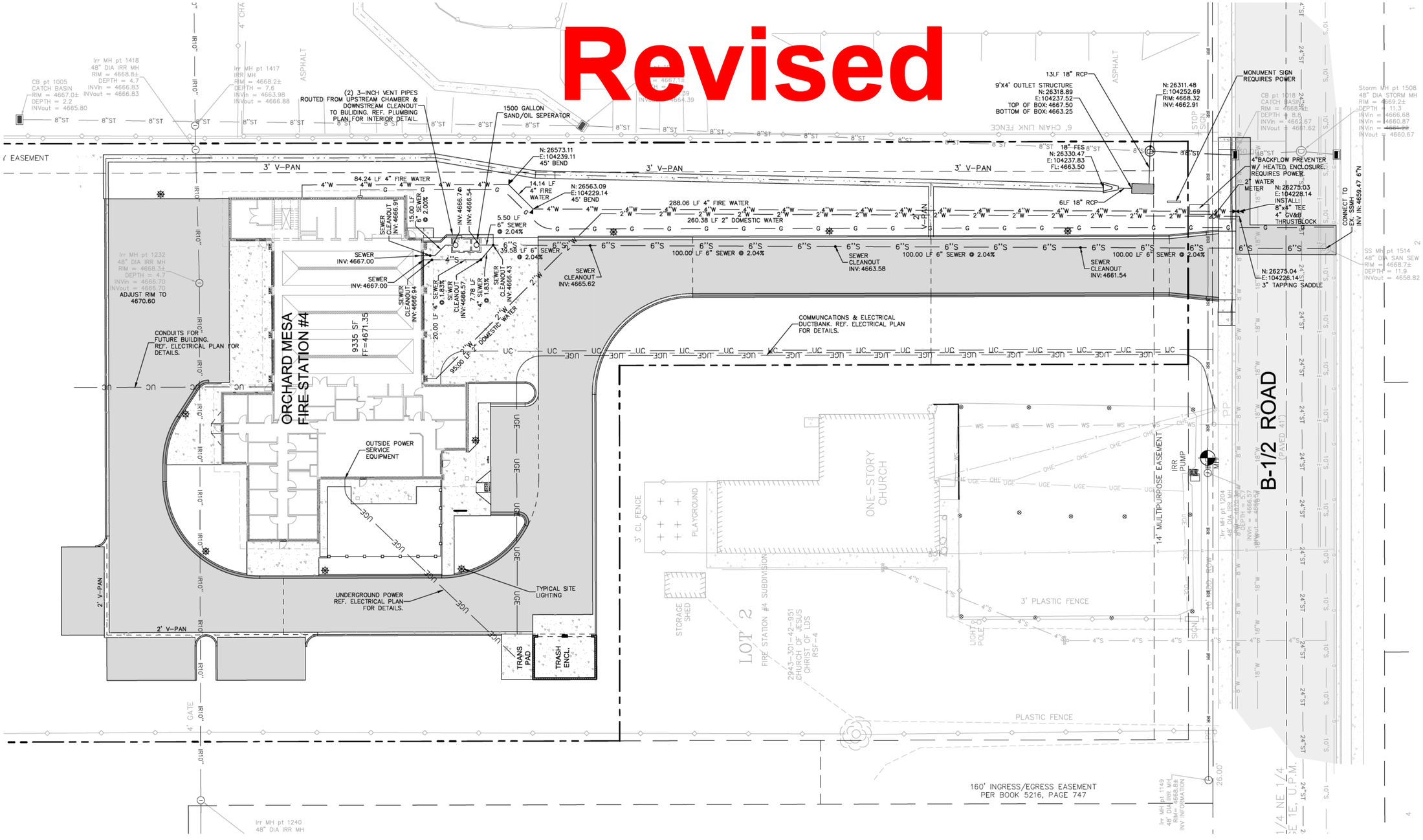
STATION #4.dwg

Revised



NOTE:

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0 20 40 60

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COLORADO LICENSED PATRICK M. SCHERER 42780 4/10/15 PROFESSIONAL ENGINEER

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-5

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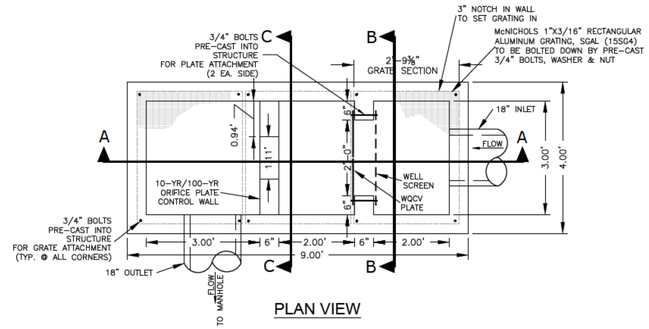
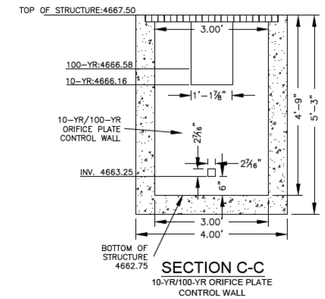
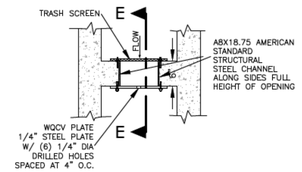


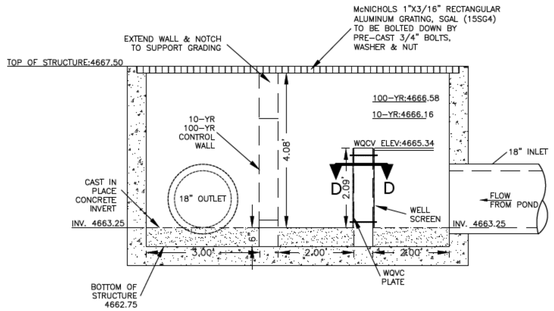
PLAN VIEW



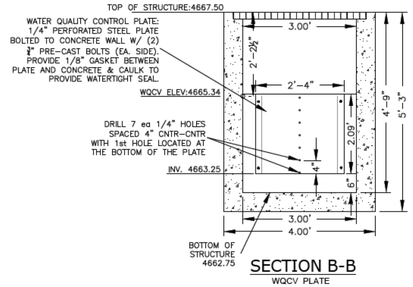
SECTION C-C
10-YR/100-YR ORIFICE PLATE CONTROL WALL



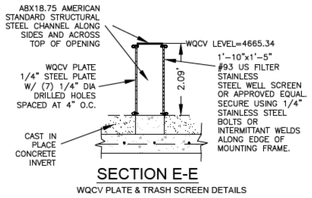
SECTION D-D
WQCV PLATE DETAIL



SECTION A-A



SECTION B-B
WQCV PLATE



SECTION E-E
WQCV PLATE & TRASH SCREEN DETAILS

OUTLET STRUCTURE
NTS

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY DETAILS

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

CITY OF GRAND JUNCTION ENGINEERING

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BY:_____ DATE:_____

ACCEPTED AS CONSTRUCTED

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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-6

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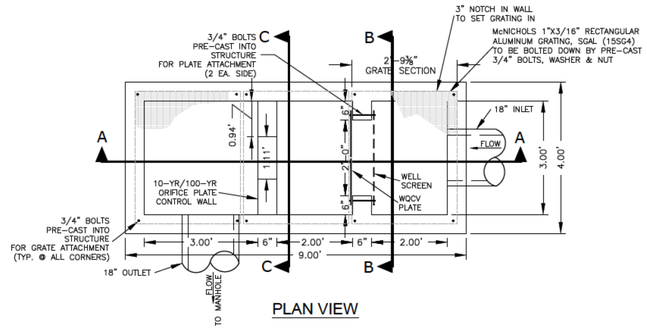
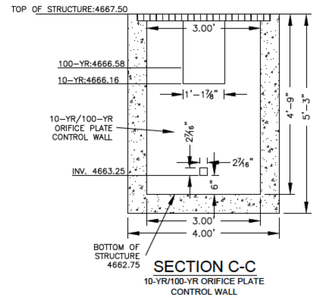
M:\PROJECTS\2013\13-0055 Orchard Mesa Fire Station\Dwg\Civil\Production Dwg\PROD SITE - FIRE STATION #4.dwg

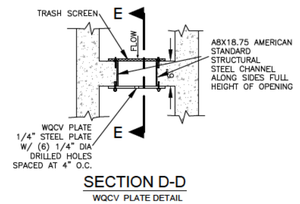
Revised



PLAN VIEW



SECTION C-C
10-YR/100-YR ORIFICE PLATE CONTROL WALL



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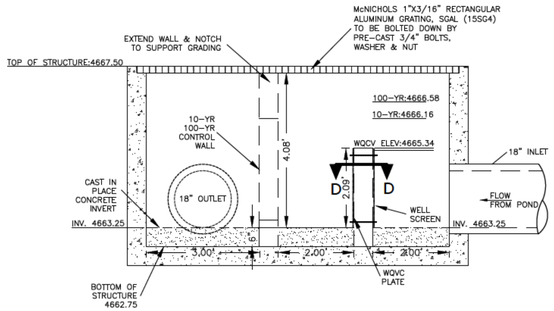
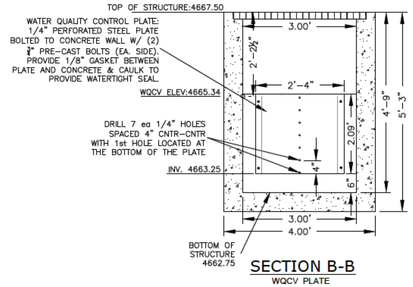
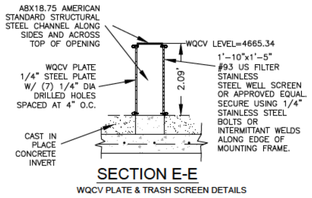
WQCV PLATE DETAIL



SECTION A-A



SECTION B-B
WQCV PLATE



SECTION E-E
WQCV PLATE & TRASH SCREEN DETAILS

OUTLET STRUCTURE
NTS

CITY OF GRAND JUNCTION ENGINEERING

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COLORADO LICENSED SCOTT THOMAS AUSTIN 42780 PROFESSIONAL ENGINEER 4/9/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY DETAILS

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-6

PROJECT NO: 1443

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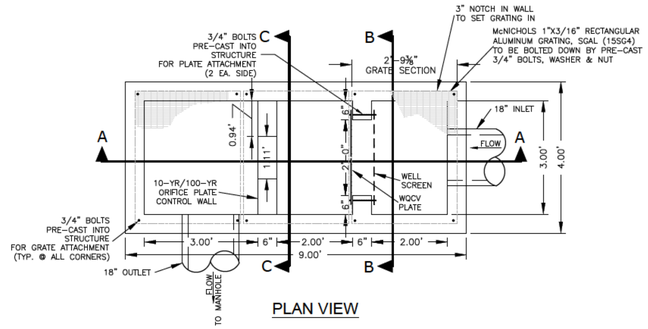
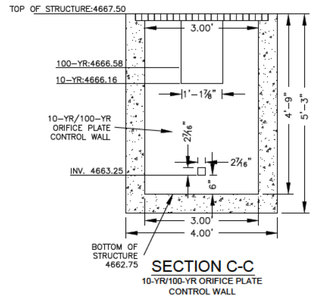
Addendum 2

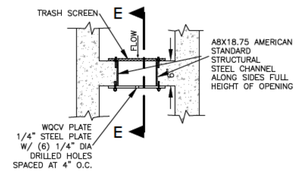
Revised



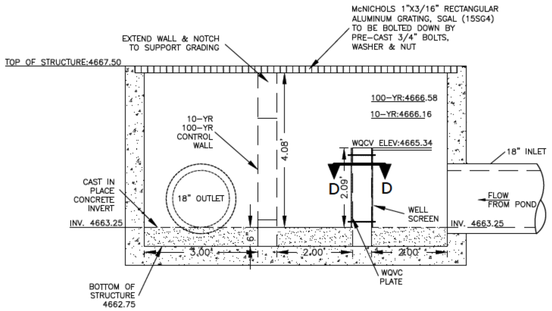
PLAN VIEW



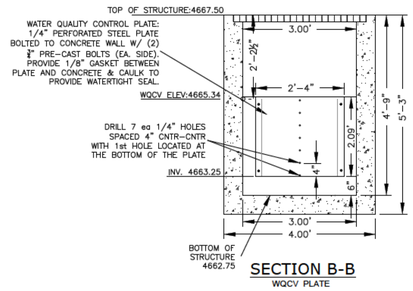
SECTION C-C
10-YR/100-YR ORIFICE PLATE CONTROL WALL



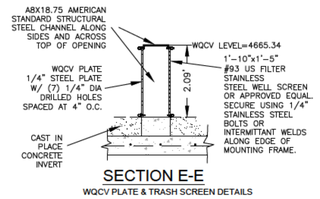
SECTION D-D
WQCV PLATE DETAIL



SECTION A-A



SECTION B-B
WQCV PLATE



SECTION E-E
WQCV PLATE & TRASH SCREEN DETAILS

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COLORADO LICENSED PROFESSIONAL ENGINEER 42780 4/10/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UTILITY DETAILS

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-6

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12/15/2014 3:35:22 PM
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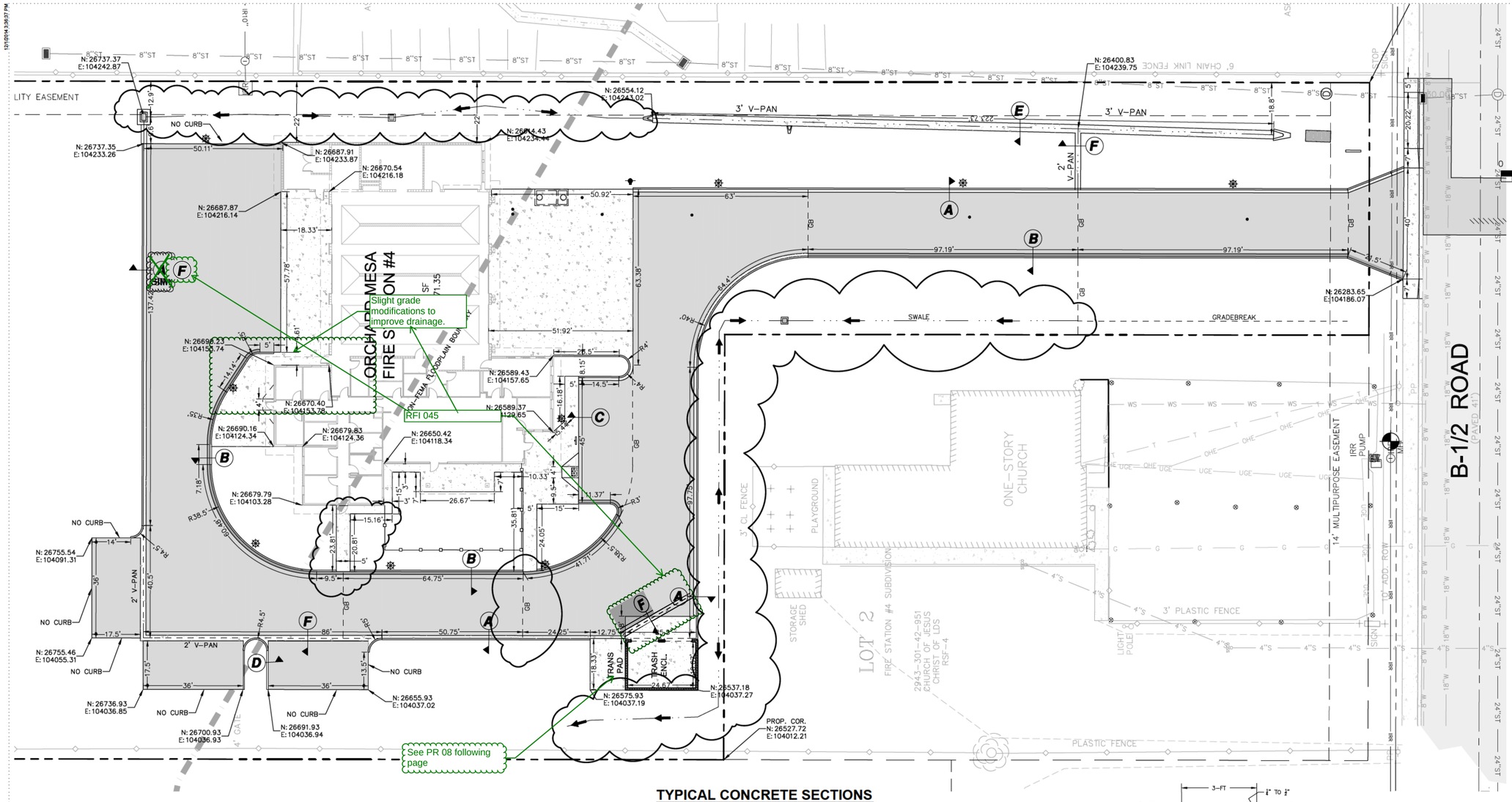

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CURB/GUTTER
- PROPOSED CURB/GUTTER
- PROPOSED SPILL CURB/GUTTER
- PROPOSED TRANSITION CURB/GUTTER
- EXISTING RETAINING WALL
- EXISTING 1-FT CONTOUR
- EXISTING 5-FT CONTOUR
- PROPOSED 1-FT CONTOUR
- PROPOSED 5-FT CONTOUR
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED HEAVY DUTY ASPHALT
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED HEAVY DUTY CONCRETE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
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- PROPOSED TRAFFIC FLOW
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- ROOF DRAIN (RD)
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- FIRE DEPARTMENT CONNETION
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- POWER POLE
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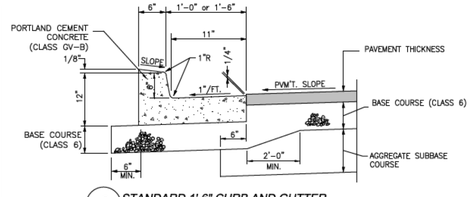
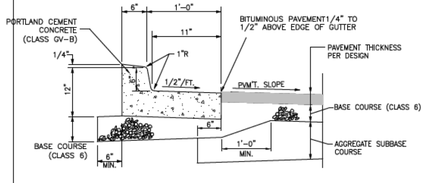
- EOP EDGE OF PAVEMENT
- TOC TOP OF CONCRETE
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- TBW TOP BACK OF WALK
- TC TOP OF CURB
- BOC BACK OF CURB
- LS LANDSCAPE AREA
- UTILITY PEDESTALS

TYPICAL CONCRETE SECTIONS

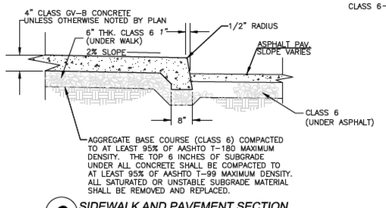


A STANDARD 1'-6" CURB AND GUTTER
NOT TO SCALE

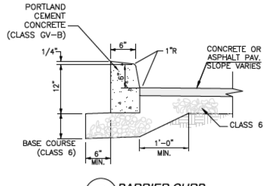
Provide mountable catch curb at similar.



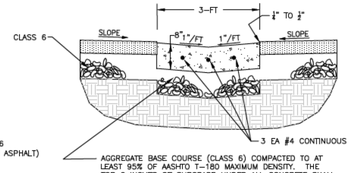
B 1'-6" SPILL CURB AND GUTTER
NOT TO SCALE



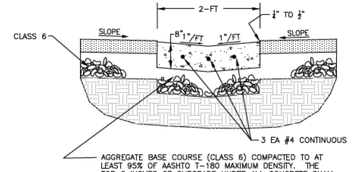
C SIDEWALK AND PAVEMENT SECTION
NOT TO SCALE



D BARRIER CURB
NOT TO SCALE



E 3' WIDE VALLEY PAN DETAIL
NOT TO SCALE



F 2' WIDE VALLEY PAN DETAIL
NOT TO SCALE

BENCHMARK

60D NAIL
N: 26287.81
E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

CITY OF GRAND JUNCTION ENGINEERING

APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

BY: _____ *DATE:* _____

ACCEPTED AS CONSTRUCTED

BY: _____ *DATE:* _____

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(970) 242-7540

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

HORIZONTAL CONTROL PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	BUILDING FOOTPRINT	5-29-15
3	IRR, DRAINAGE & FIRE LINE	6-11-15
4	CONCRETE WALK	6-19-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-7

PROJECT NO: 1443

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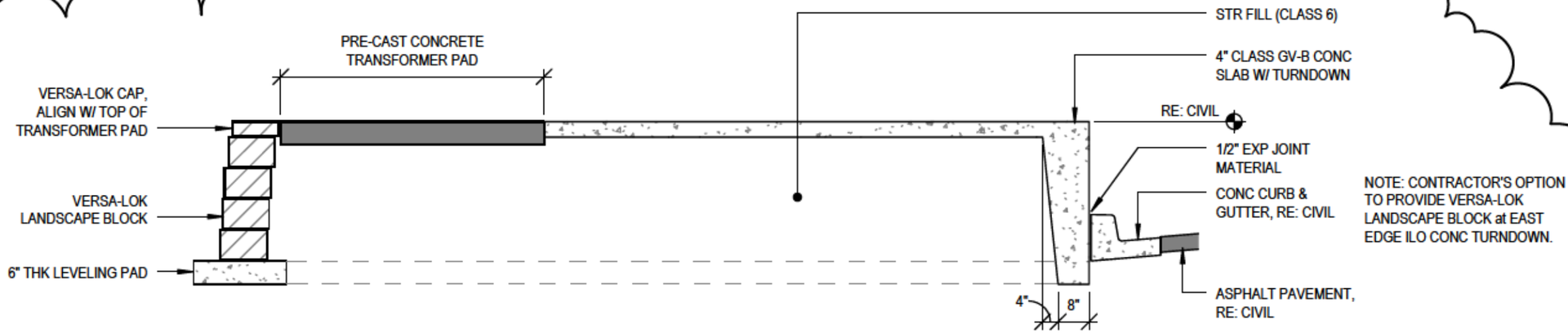
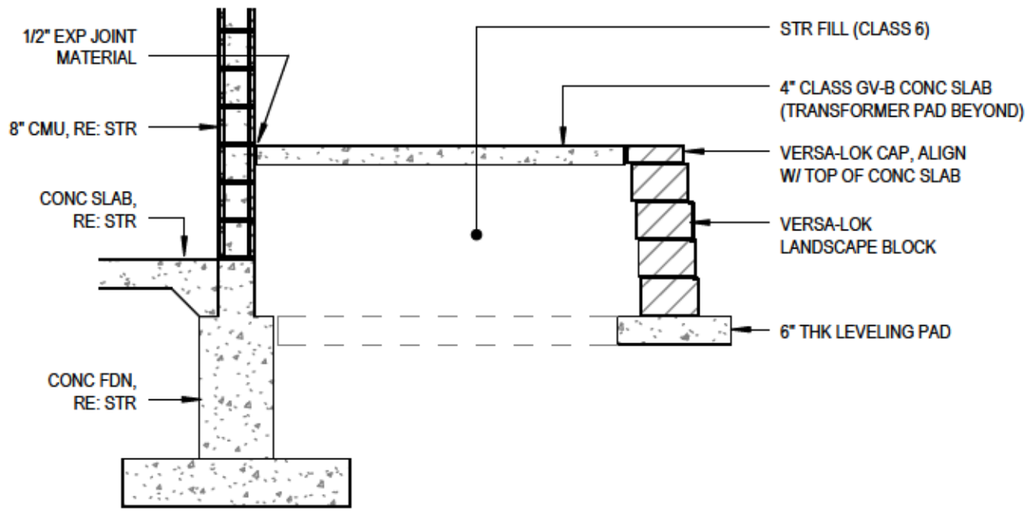


NOTE: CONTRACTOR'S OPTION TO PROVIDE VERSA-LOK LANDSCAPE BLOCK at EAST EDGE ILO CONC TURNDOWN.

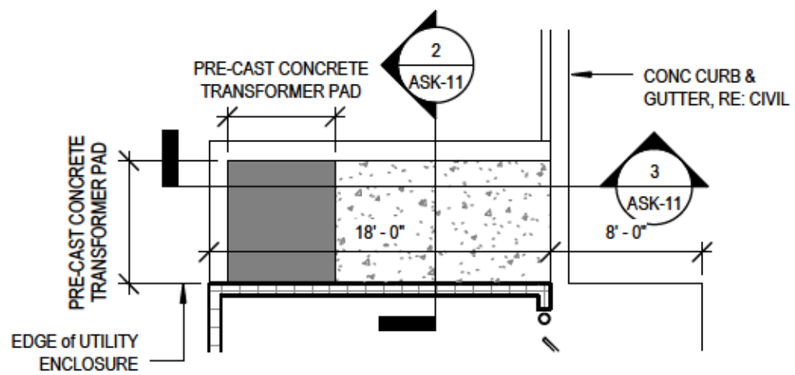
3 TRANSFORMER PAD SECTION A

SCALE: 3/8" = 1'-0"



2 TRANSFORMER PAD SECTION B

SCALE: 3/8" = 1'-0"



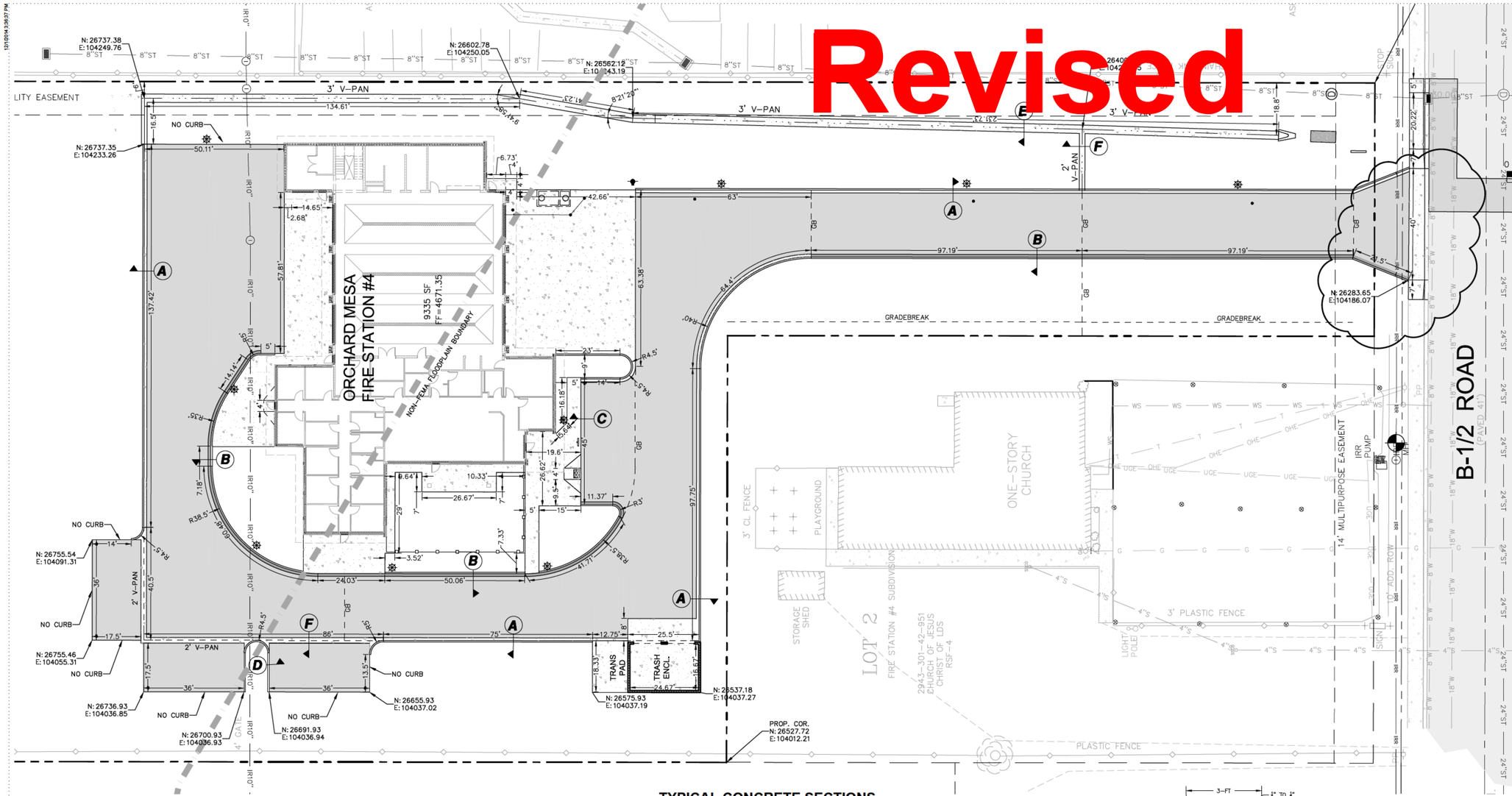
1 FLOOR PLAN - TRANSFORMER PAD

SCALE: 1/8" = 1'-0"

Grades around pad will remain per Civil

CHAMBERLIN ARCHITECTS GRAND JUNCTION, COLORADO 970.242.6804 RAPID CITY, SOUTH DAKOTA 605.355.6804	DESCRIPTION: **TRANSFORMER PAD DETAILS**				ISSUED WITH: PR#008	**ASK-11** LOCATION:
PROJECT: **OMFS#4**	PROJECT NO: **1443**	SCALE: **As indicated**	DATE: **7/23/15**	PREPARED BY: **JW**		

Revised



TYPICAL CONCRETE SECTIONS

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- PROPOSED EASEMENT
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- PROPOSED BUILDING
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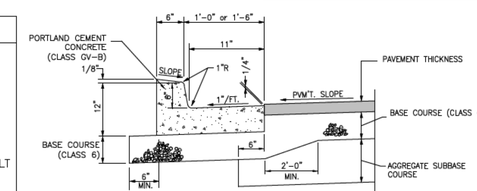
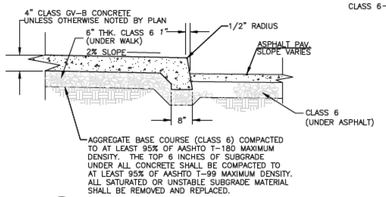
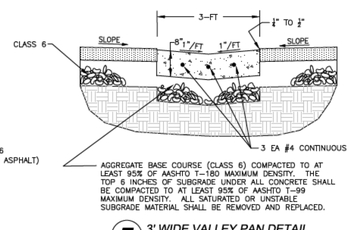


A STANDARD 1'-6" CURB AND GUTTER
NOT TO SCALE



C SIDEWALK AND PAVEMENT SECTION
NOT TO SCALE



E 3' WIDE VALLEY PAN DETAIL
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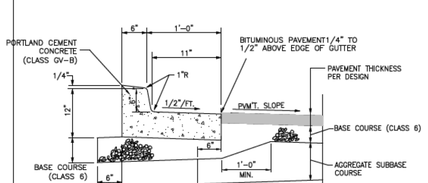

B 1'-6" SPILL CURB AND GUTTER
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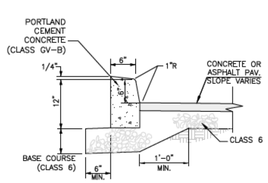
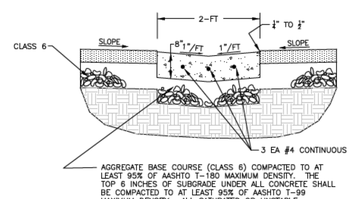


D BARRIER CURB
NOT TO SCALE



F 2' WIDE VALLEY PAN DETAIL
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BENCHMARK

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CITY OF GRAND JUNCTION ENGINEERING

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COLORADO LICENSED
42780
4/29/15
PROFESSIONAL ENGINEER

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

HORIZONTAL CONTROL PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-7

PROJECT NO: 1443

Addendum 2

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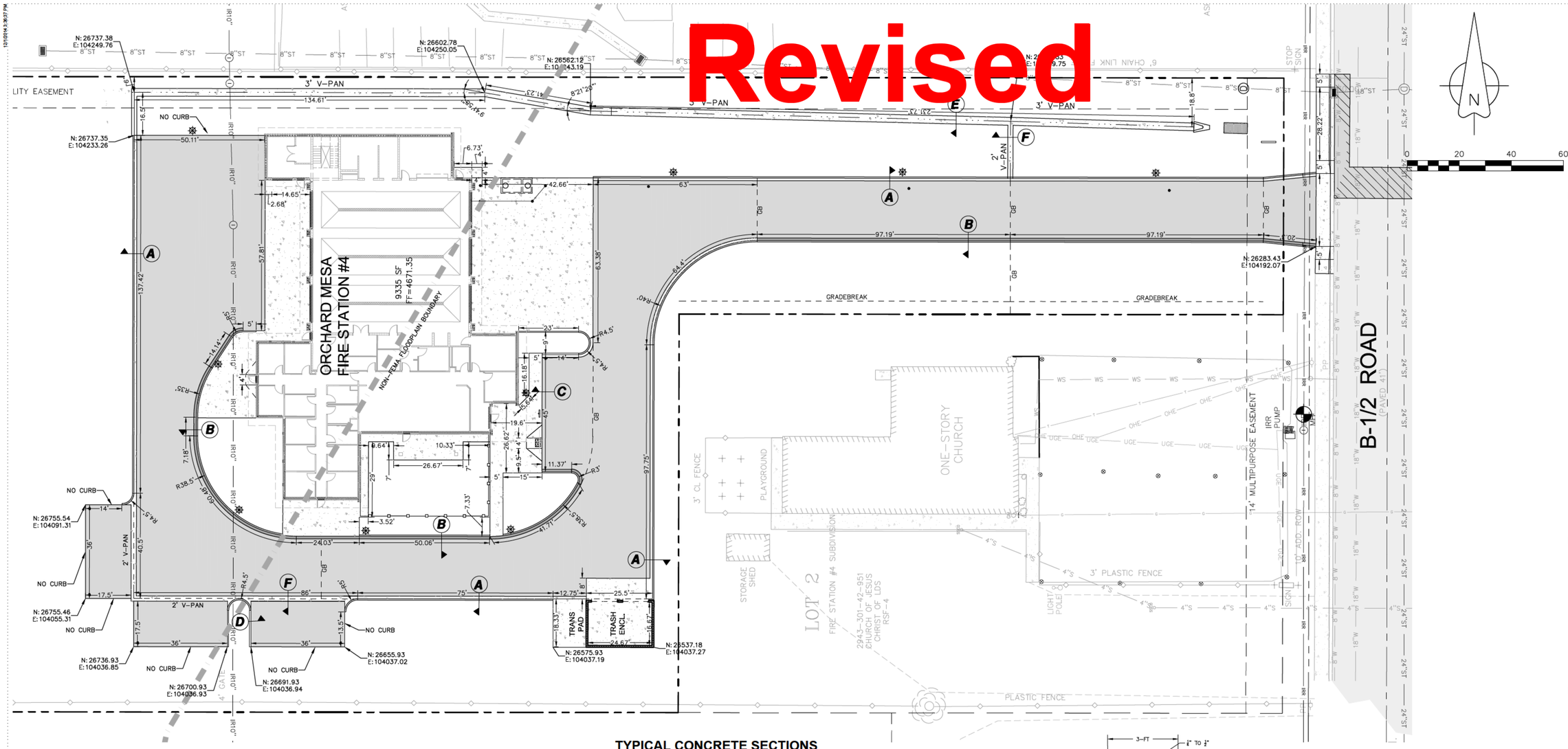
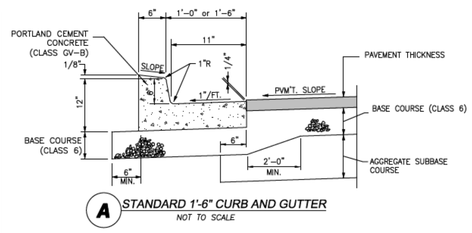
Revised



TYPICAL CONCRETE SECTIONS



A STANDARD 1'-6" CURB AND GUTTER
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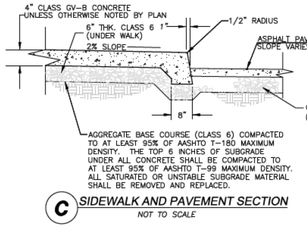

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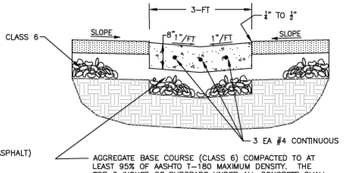

E 3' WIDE VALLEY PAN DETAIL
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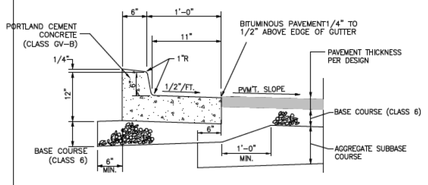

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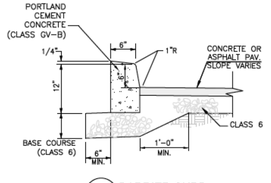
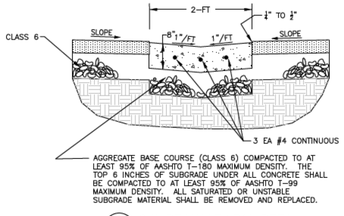


D BARRIER CURB
NOT TO SCALE



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CITY OF GRAND JUNCTION ENGINEERING

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COLORADO LICENSED SCOTT THOMAS AUSTIN #27780 PROFESSIONAL ENGINEER 4/9/15

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

HORIZONTAL CONTROL PLAN

NO:	ISSUED FOR:	DATE:
△		
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△		
△		
△		

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-7

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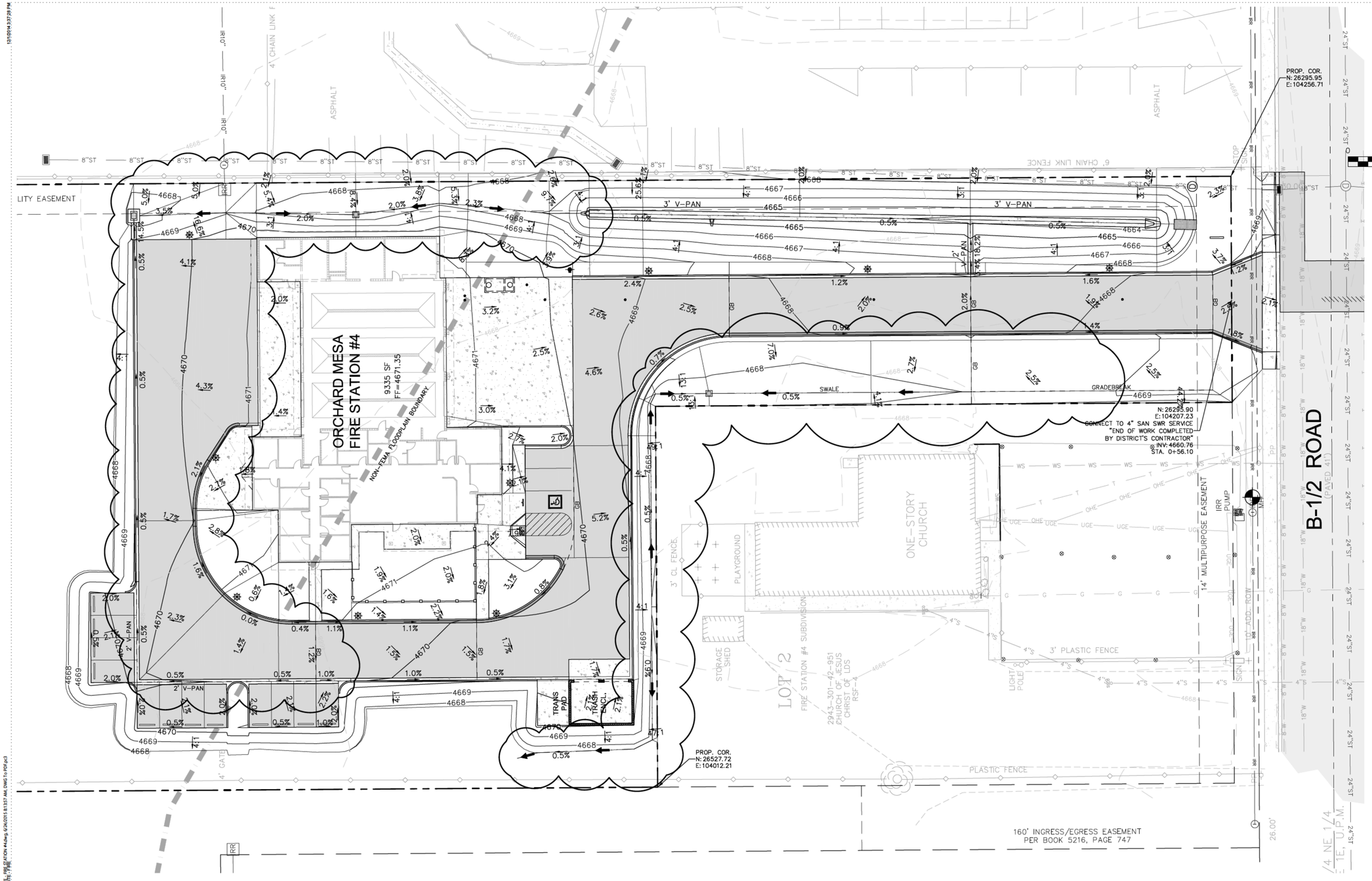

FLOODPLAIN INFORMATION

As shown by plan view, the project site is located within a NON-FEMA 100-year floodplain boundary according to the "Orchard Mesa Flood Hazard Mitigation Report", dated July 2009, and prepared by Ayres Associates. The report identifies a 100-year water surface elevation of approximately 4669.35 (NAVD88) near the center of the site, which shall be used as the floodplain elevation.

BENCHMARK

60D NAIL
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E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

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BY: _____ *DATE:* _____

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(970) 242-7540

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

OVERALL GRADING PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	IRR, DRAINAGE & FIRE LINE	6-11-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-8

PROJECT NO: 1443

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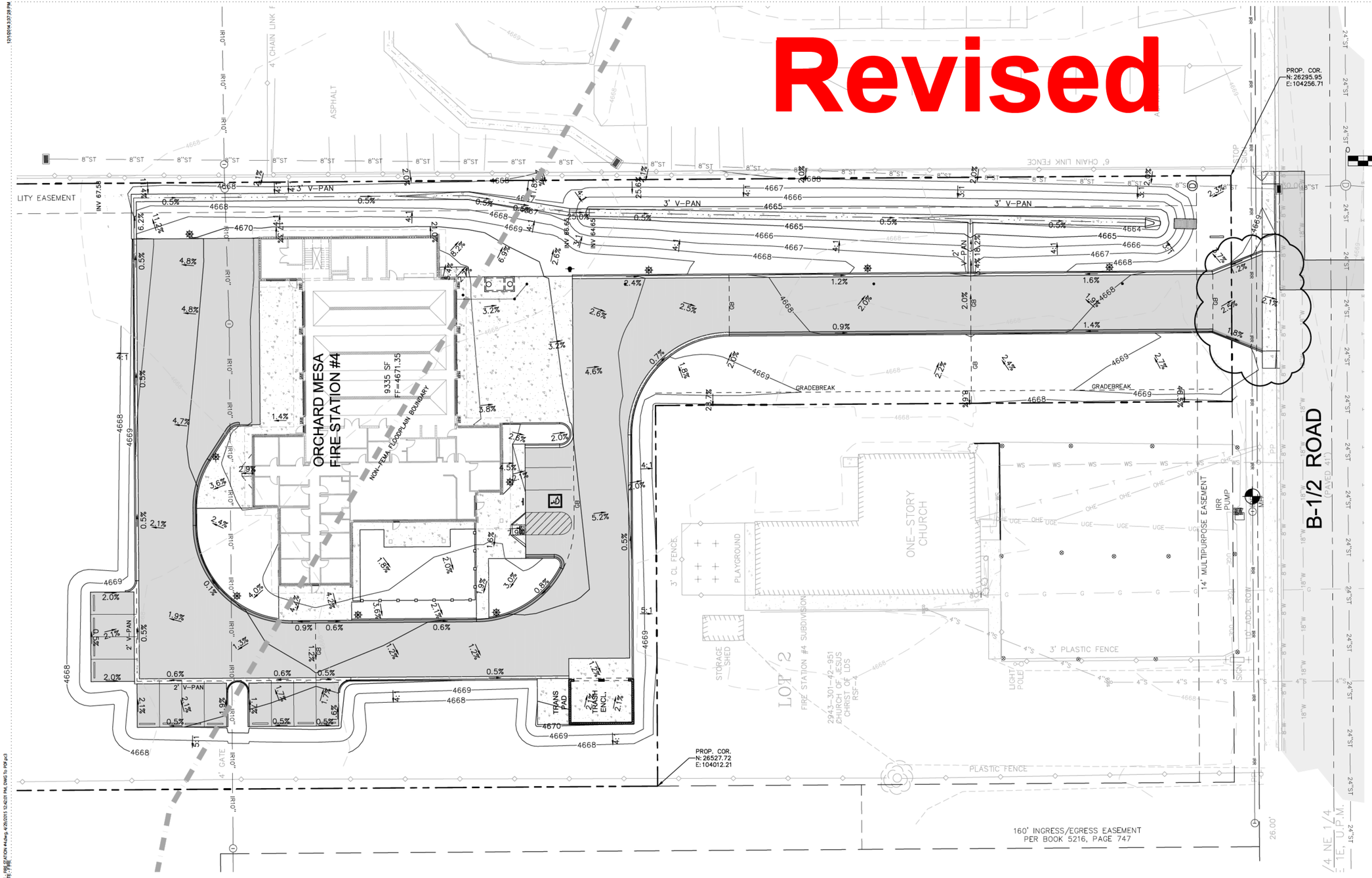
PR 03

Revised



FLOODPLAIN INFORMATION

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BENCHMARK

60D NAIL
N: 26287.81
E: 104125.06
ELEV: 4668.30
NAVD88
NAD83
(PER CITY OF GRAND JUNCTION)

CITY OF GRAND JUNCTION ENGINEERING

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COLORADO LICENSED
MATTHEW A. NOSBISCH
42780
4/9/15
PROFESSIONAL ENGINEER

ORCHARD MESA
FIRE STATION #4

GRAND JUNCTION, COLORADO

OVERALL GRADING PLAN

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-8

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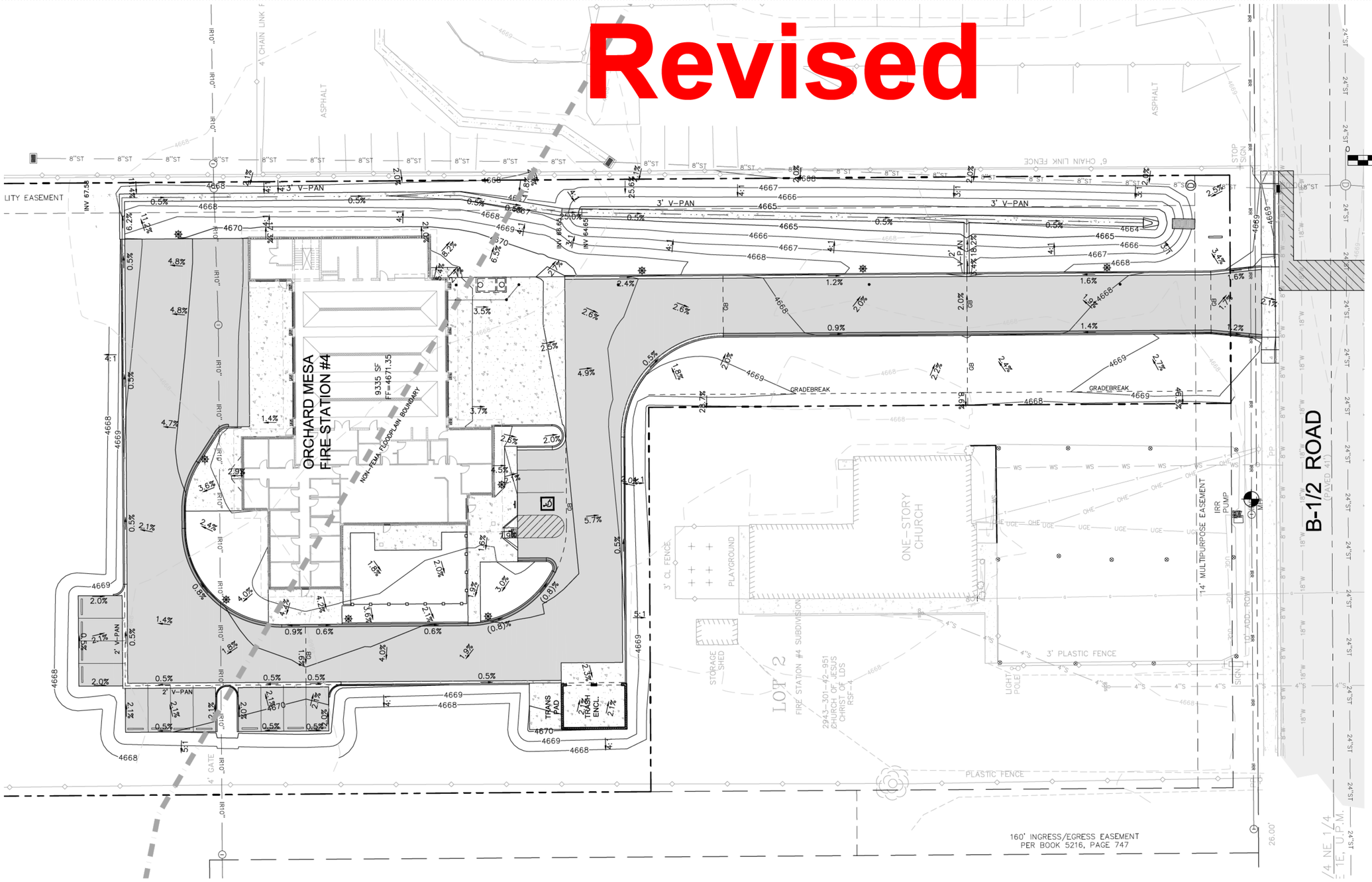
Addendum 2

Revised



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COLORADO LICENSED
THOMAS M. ACKERMAN
42780
4/10/15
PROFESSIONAL ENGINEER

ORCHARD MESA
FIRE STATION #4

GRAND JUNCTION, COLORADO

OVERALL GRADING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

SHEET NO: C-8

PROJECT NO: 1443

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ORCHARD MESA FIRE STATION #4

9335 SF
FF=4671.35

NON-FEMA FLOODPLAIN BOUNDARY

4' GATE

IRRIGATION

FLOODPLAIN INFORMATION

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GRADING PLAN SHEET 1

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	BUILDING FOOTPRINT	5-29-15
3	IRR, DRAINAGE & FIRE LINE	6-11-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15 SHEET NO: C-9

PROJECT NO: 1443

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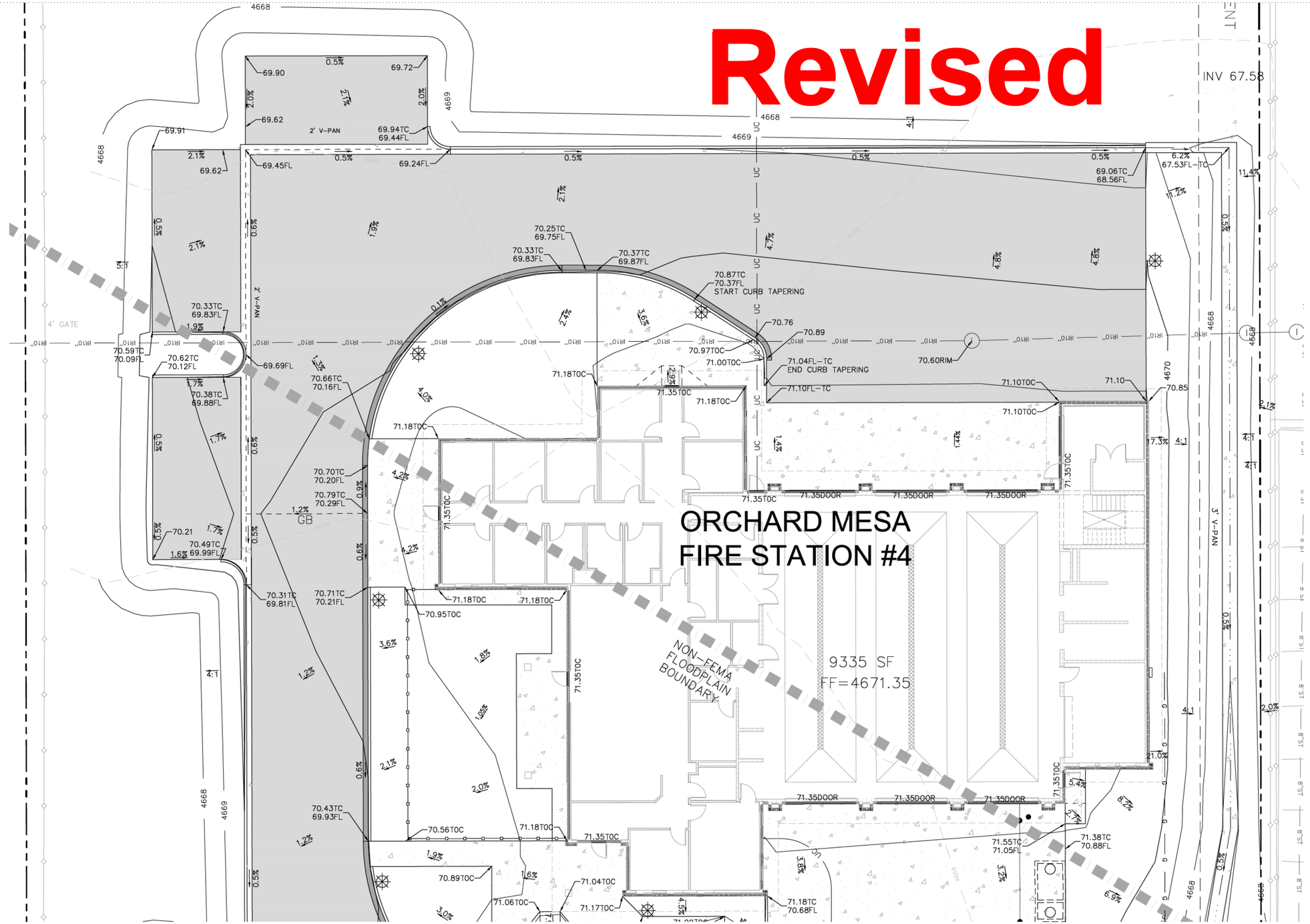
PR 03

Revised



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COLORADO LICENSED SCOTT CHRISTIAN AUSTIN 42780 4/29/15 PROFESSIONAL ENGINEER

ORCHARD MESA
FIRE STATION #4

GRAND JUNCTION, COLORADO

GRADING PLAN
SHEET 1

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: C-9

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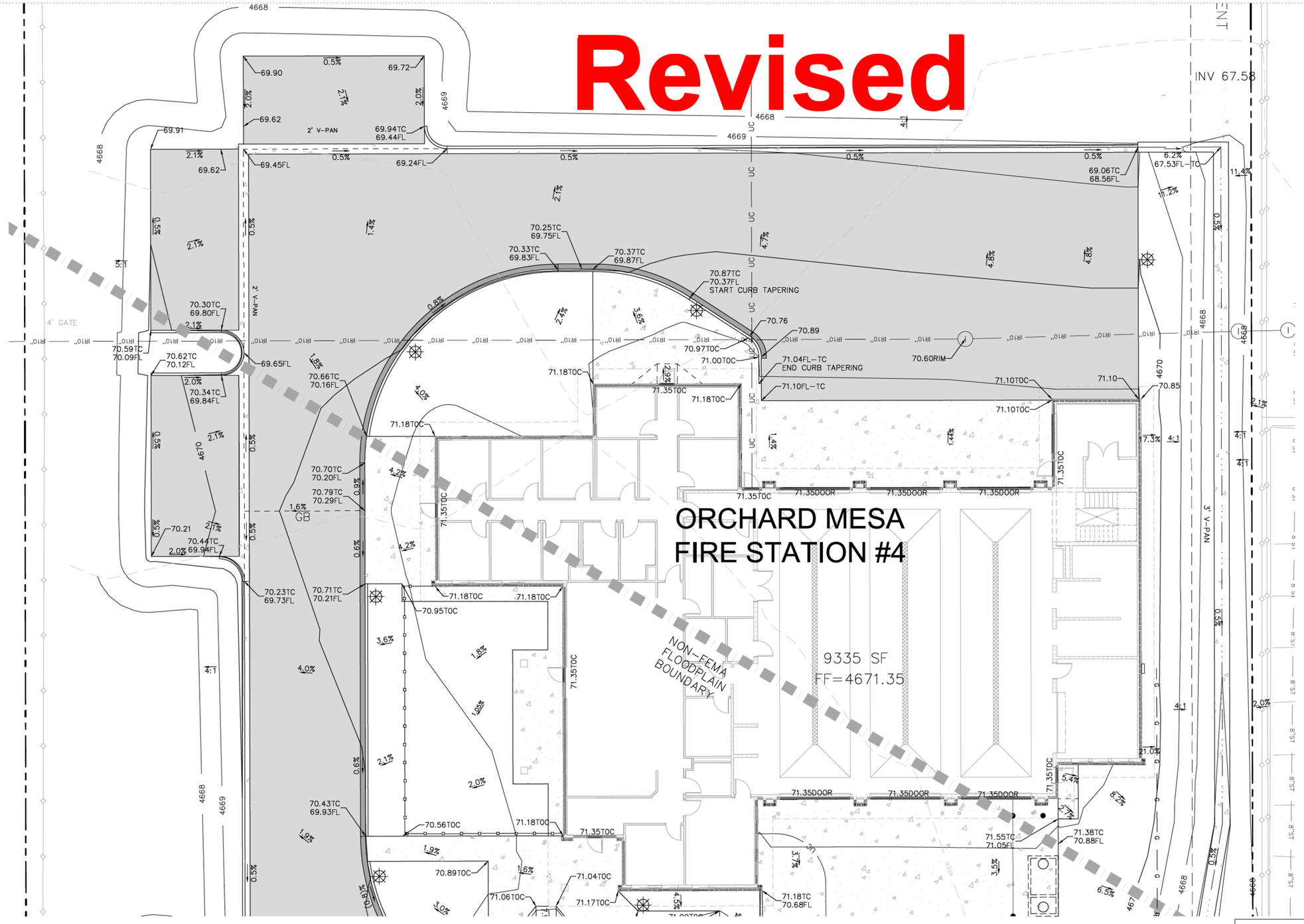
Addendum 2

Revised



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COLORADO LICENSED — JOHN P. AUSTIN — 42780 — 4/10/15 — PROFESSIONAL ENGINEER

N

0 10 20 30

ORCHARD MESA
FIRE STATION #4

GRAND JUNCTION, COLORADO

GRADING PLAN
SHEET 1

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

SHEET NO: **C-9**

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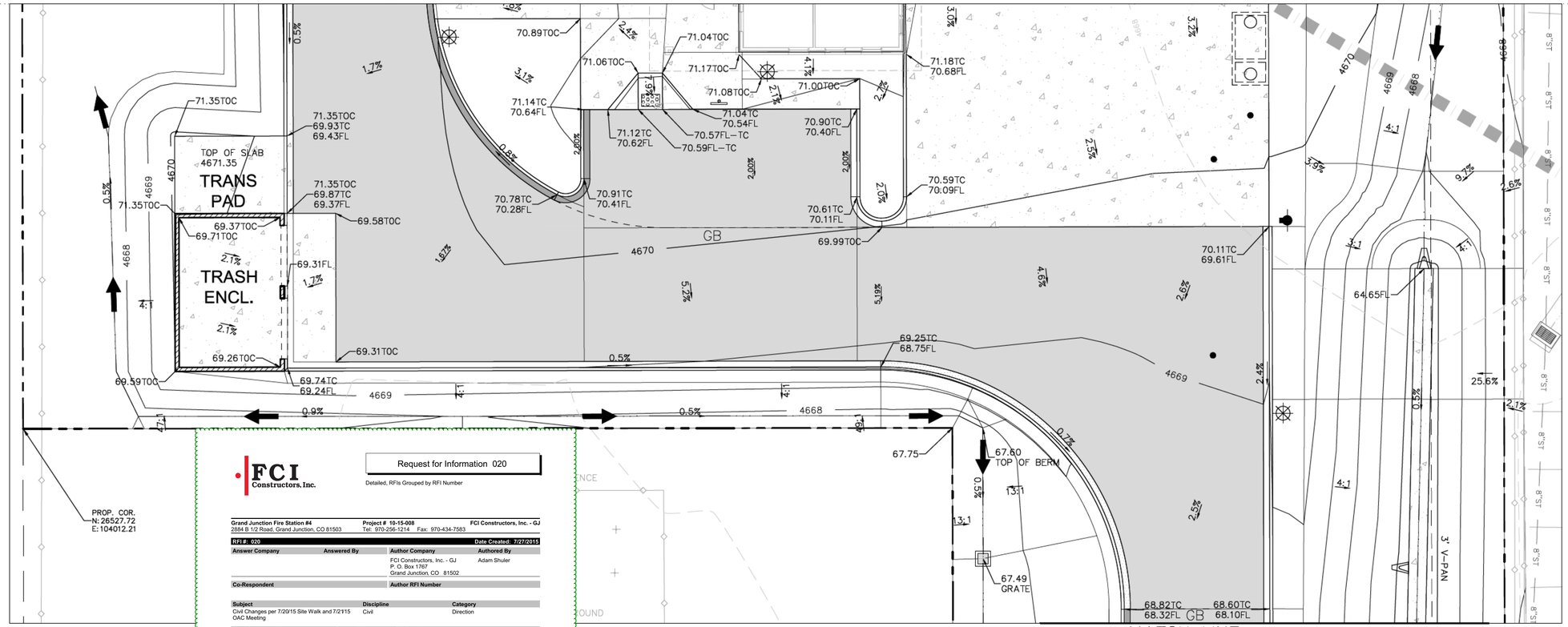

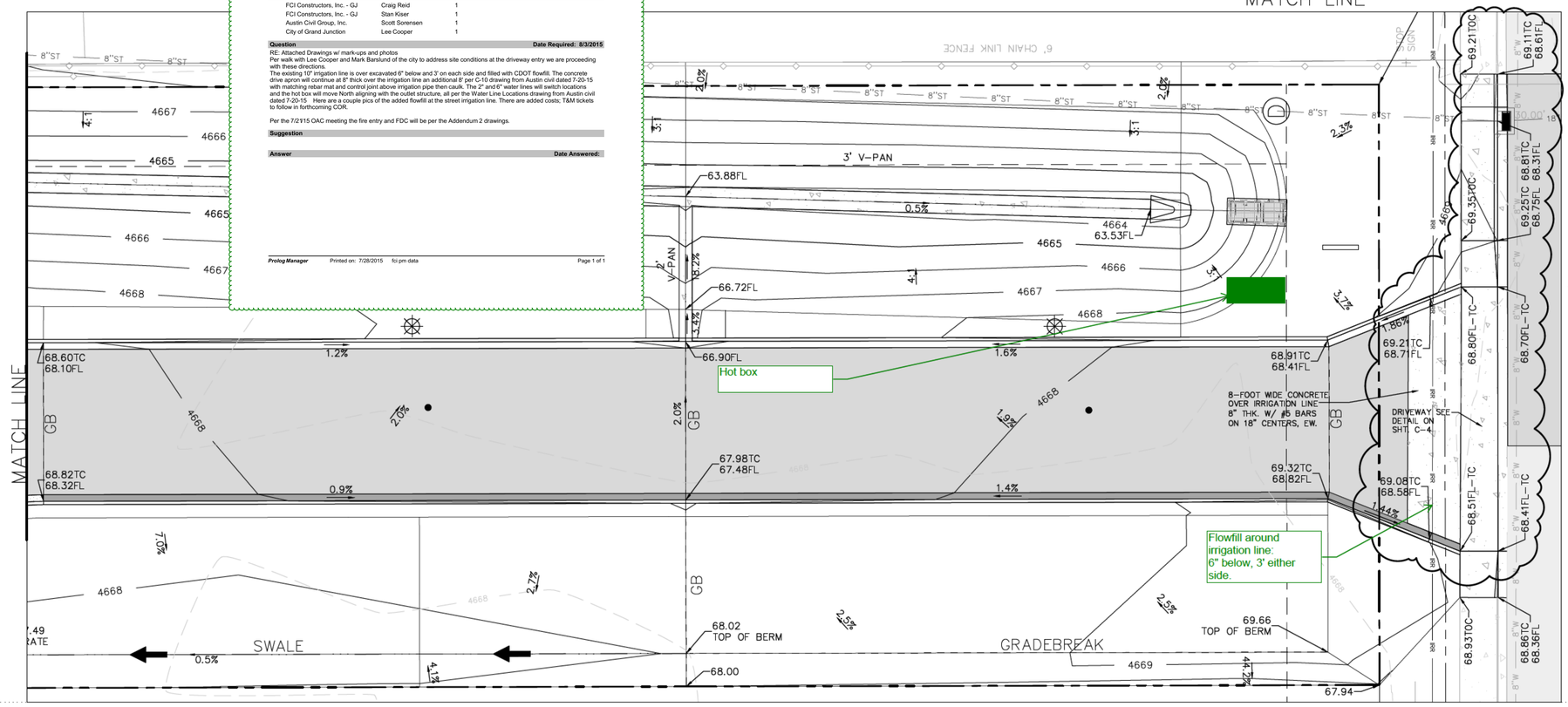

FCI Constructors, Inc.

Request for Information 020

Detailed, RFIs Grouped by RFI Number

Grand Junction Fire Station #4	**Project # 10-15-008**	**FCI Constructors, Inc. - GJ**
2884 B 1/2 Road, Grand Junction, CO 81503	Tel: 970-256-1214 Fax: 970-434-7583	

RFI #: 020 — **Date Created: 7/27/2015**

Answer Company	Answered By	Author Company	Authored By
		FCI Constructors, Inc. - GJ P. O. Box 1767 Grand Junction, CO 81502	Adam Shuler

Co-Respondent	Author RFI Number

Subject	Discipline	Category
Civil Changes per 7/20/15 Site Walk and 7/21/15 OAC Meeting	Civil	Direction

Cc: Company Name	Contact Name	Copies	Notes
FCI Constructors, Inc. - GJ	Craig Reid	1	
FCI Constructors, Inc. - GJ	Stan Kiser	1	
Austin Civil Group, Inc.	Scott Sorensen	1	
City of Grand Junction	Lee Cooper	1	

Question — **Date Required: 8/3/2015**

RE: Attached Drawings w/ mark-ups and photos
Per walk with Lee Cooper and Mark Barslund of the city to address site conditions at the driveway entry we are proceeding with these directions.
The existing 10" irrigation line is over excavated 6" below and 3' on each side and filled with CDOT flowfill. The concrete drive apron will continue at 8" thick over the irrigation line an additional 8' per C-10 drawing from Austin civil dated 7-20-15 with matching rebar mat and control joint above irrigation pipe then caulk. The 2" and 6" water lines will switch locations and the hot box will move North aligning with the outlet structure, all per the Water Line Locations drawing from Austin civil dated 7-20-15 Here are a couple pics of the added flowfill at the street irrigation line. There are added costs; T&M tickets to follow in forthcoming COR.

Per the 7/21/15 OAC meeting the fire entry and FDC will be per the Addendum 2 drawings.

Suggestion

Answer — **Date Answered:**

Prolog Manager Printed on: 7/28/2015 fci pm data Page 1 of 1

FLOODPLAIN INFORMATION

As shown by plan view, the project site is located within a NON—FEMA 100—year floodplain boundary according to the "Orchard Mesa Flood Hazard Mitigation Report", dated July 2009, and prepared by Ayres Associates. The report identifies a 100—year water surface elevation of approximately 4669.35 (NAVD88) near the center of the site, which shall be used at the floodplain elevation.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GRADING PLAN SHEET 2

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	IRR, DRAINAGE & FIRE LINE	6-11-15
3	DRIVEWAY GRADES	7-20-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15 SHEET NO: C-10

PROJECT NO: 1443

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RFI 020

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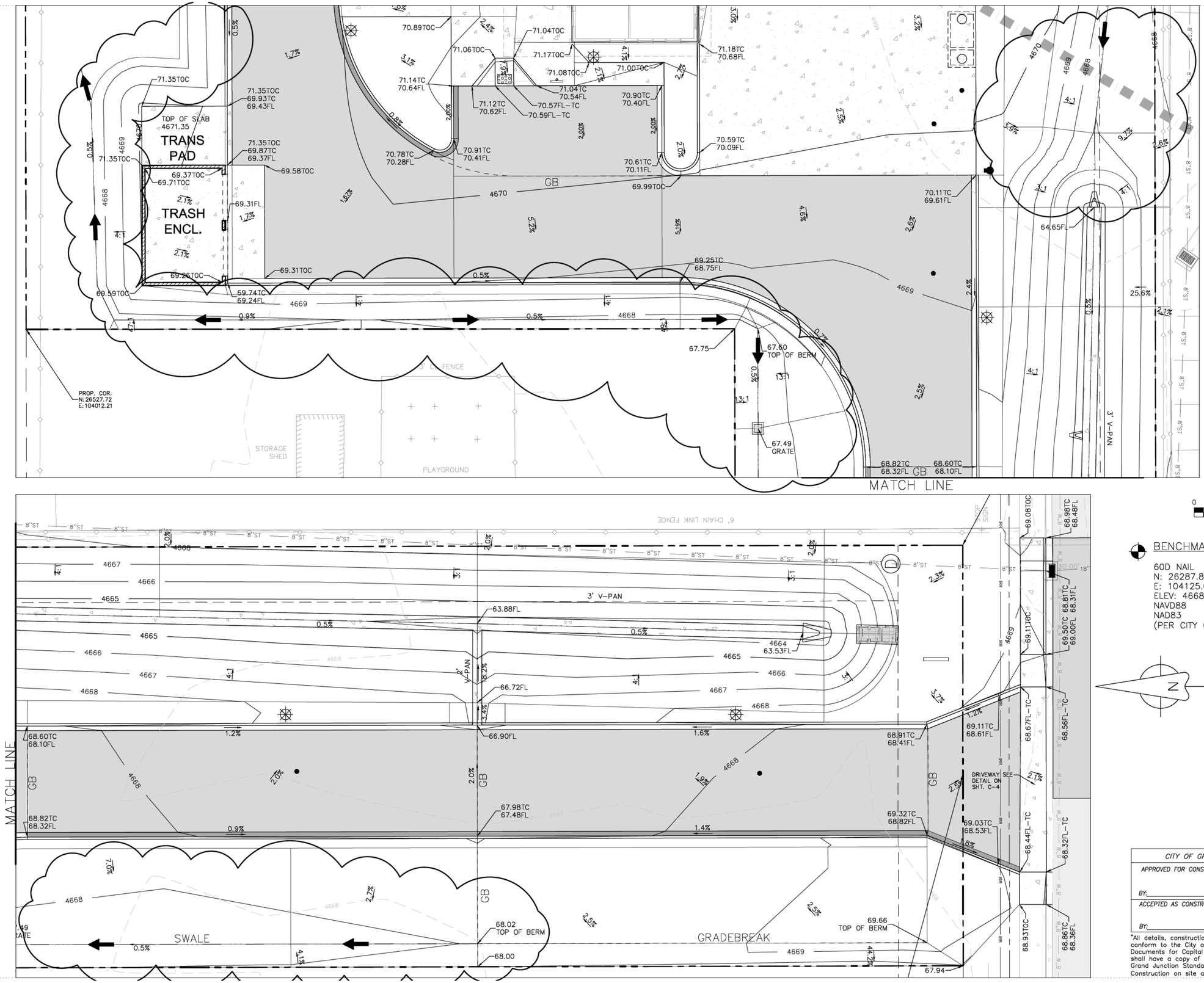

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GRAND JUNCTION, COLORADO

GRADING PLAN SHEET 2

NO:	ISSUED FOR:	DATE:
1	REVIEW COMMENTS RND#1	4-28-15
2	IRR, DRAINAGE & FIRE LINE	6-11-15

PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

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PROJECT NO: 1443

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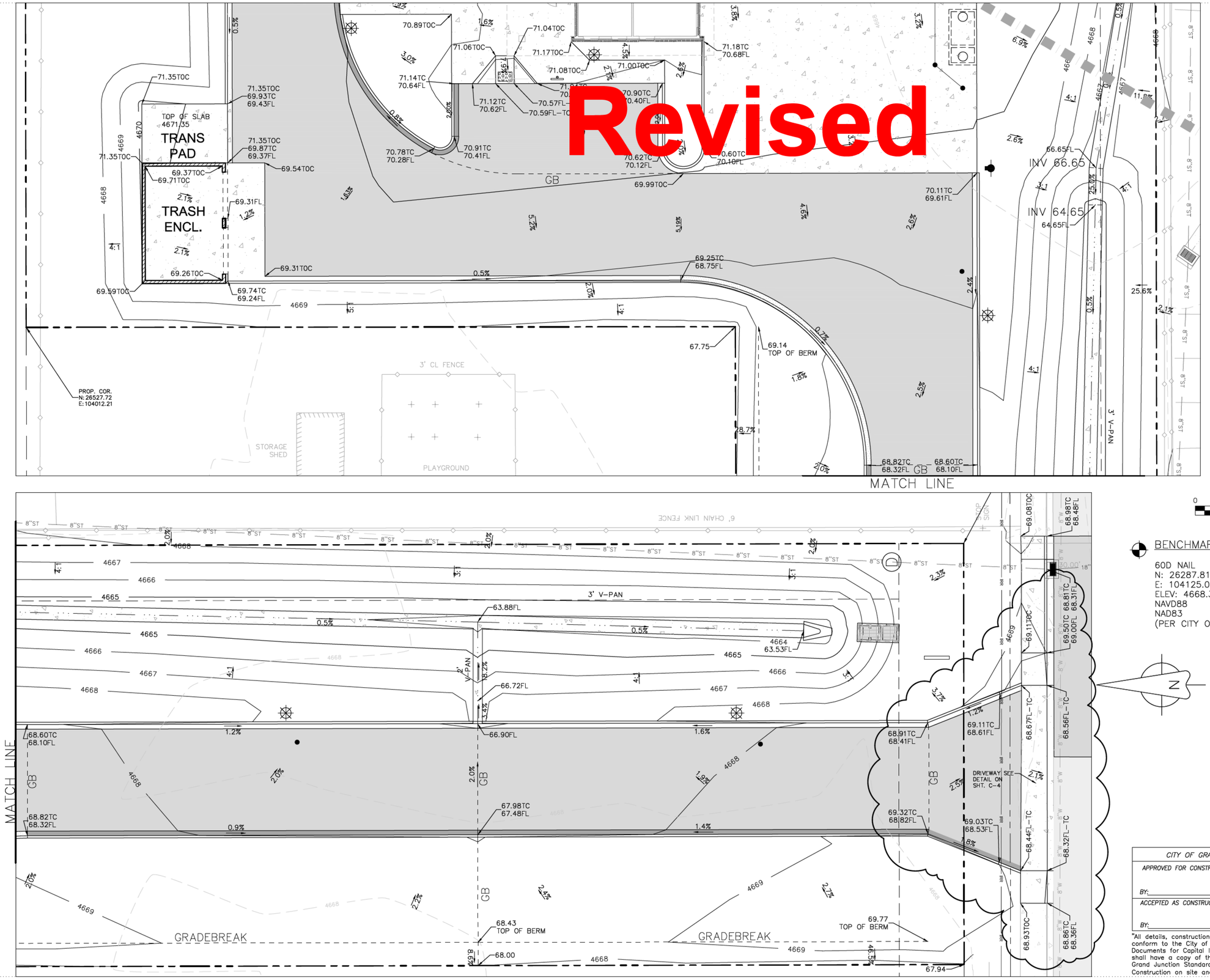
PR 03



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COLORADO LICENSED
SCOTT MATTHEW AUSTIN
42780
PROFESSIONAL ENGINEER

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GRADING PLAN SHEET 2

NO:	ISSUED FOR:	DATE:
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DRAWN BY: LMS CHECKED BY: MRA

DATE: 4-10-15

PROJECT NO: 1443

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Addendum 2

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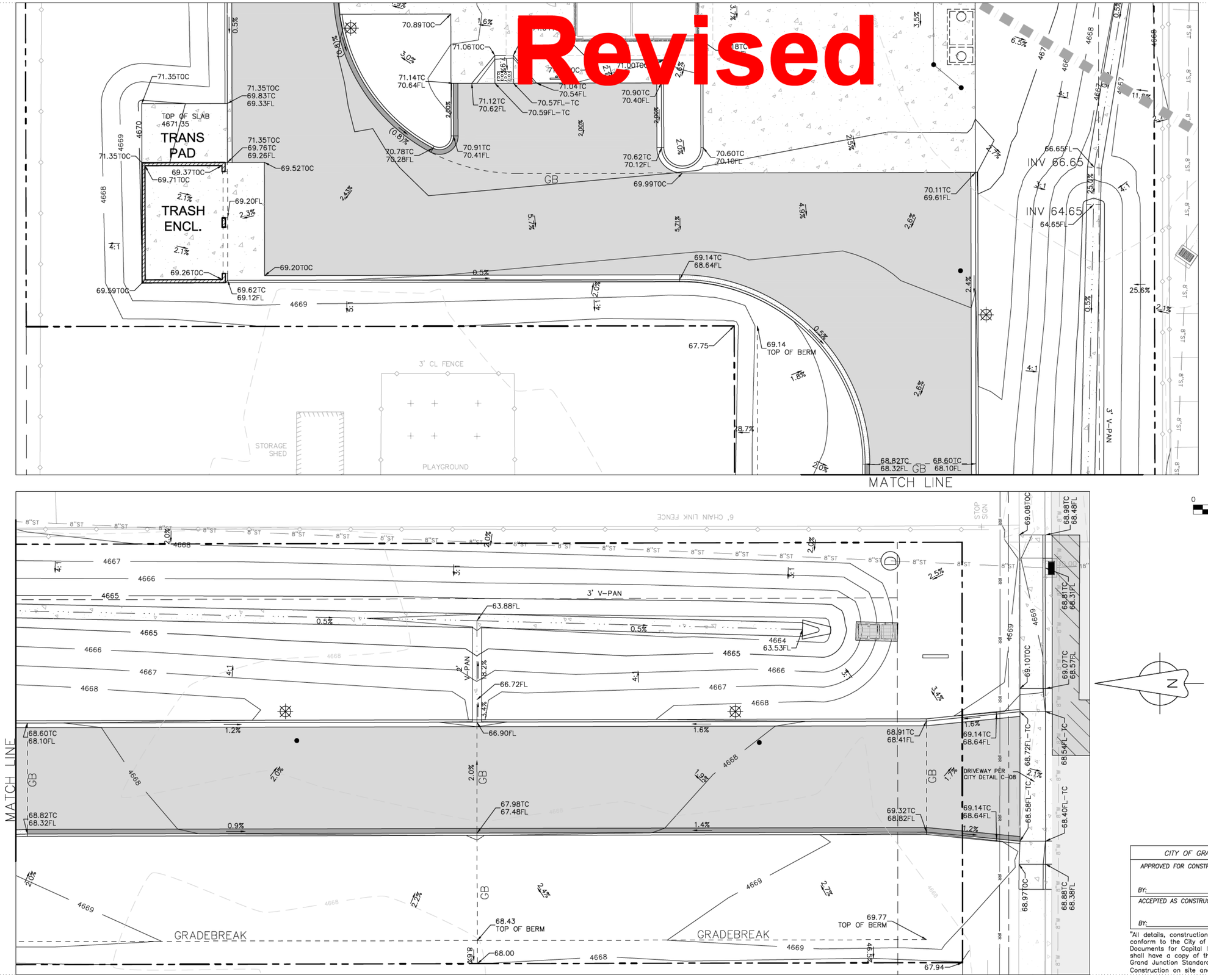
Revised



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COLORADO LICENSED
THOMAS R. ROHRER
42780
4/19/15
PROFESSIONAL ENGINEER

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GRADING PLAN SHEET 2

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: LMS CHECKED BY: MRA

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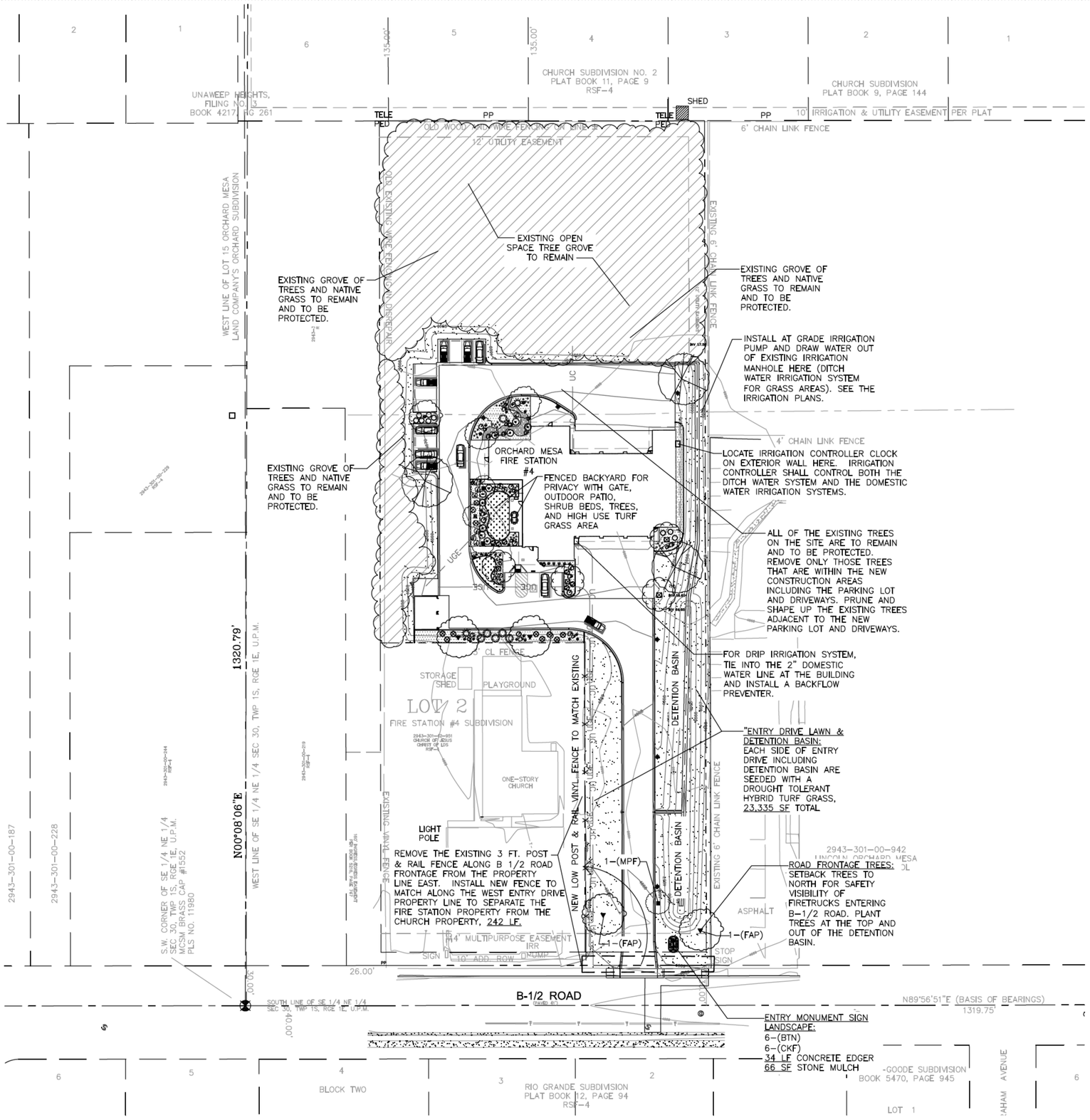

IRRIGATION NOTES:

1. CONTRACTOR SHALL INSTALL TWO UNDERGROUND PRESSURIZED AUTOMATIC IRRIGATION SYSTEMS FOR THE SITE. SEE THE IRRIGATION PLANS FOR THE DESIGN & PROPOSED LOCATIONS OF THE DITCH WATER IRRIGATION PUMP, IRRIGATION CONTROLLER, AND THE DOMESTIC WATER BACKFLOW PREVENTER.

2. THE LAWN AND DROUGHT TOLERANT GRASS AREAS ARE TO BE IRRIGATED WITH NON-POTABLE DITCH IRRIGATION WATER. A PUMP AND FILTER SHALL BE INSTALLED ACCORDING TO INDUSTRY GUIDELINES. SEE THE IRRIGATION PLANS.

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CITY OF GRAND JUNCTION LANDSCAPE REQUIREMENTS:
154,544 SF (3.55 ACRES) SITE OF WHICH
74,350 SF AREA IS DEVELOPED, 80,194 SF LEFT NATIVE

74,350 / 2500 = 30 REQUIRED TREES
74,350 / 300 = 248 REQUIRED SHRUBS

EXISTING TREES ALONG WEST PROPERTY LINE =
22 EXISTING TREES WITH CALIPERS RANGING FROM 4" – 12":

4" CALIPER X 12 = 48" CALIPER
5" CALIPER X 4 = 20" CALIPER
6" CALIPER X 2 = 12" CALIPER
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8" CALIPER X 1 = 8" CALIPER
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22 TREES = 114" CALIPER

30 TREES REQUIRED X 2" CALIPER = 60" CALIPER REQUIRED
114" EXISTING CALIPER – 60" REQUIRED = 54" CALIPER ADDITIONAL = NO TREES REQUIRED EXCEPT PER CODE AREAS INCLUDING: PARKING LOTS PERIMETER, PARKING LOT ISLANDS, ROAD FRONTAGES, BUFFERS, AND BUILDING PERIMETER.

SHRUB REDUCTION =
54" CALIPER ADDITIONAL X -3 SHRUBS/1"CALIPER ADDITIONAL=
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248 SHRUBS REQUIRED – 162 SHRUBS = 86 SHRUBS REQ.

CONVERT 21 SHRUBS TO PERENNIALS AT THE 3:1 PERENNIAL TO SHRUB RATIO = 63 PERENNIALS
86 – 21 SHRUBS = 65 SHRUBS REQUIRED

TREES REQUIRED = 18 TREES (2" CALIPER)
TREES PROVIDED = 18 TREES (2" CALIPER)

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LANDSCAPE MASTER PLAN
Scale: 1" = 40'-0"
0 40 80 120

NORTH

Julee Wolverton,
Landscape Architect
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Montrose, CO 81403
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c: 970.417.1779
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BY:_____ DATE:_____
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APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
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JULEE WOLVERTON LA - 505 04/17/2008 Julee Wolverton Original Date of Licensure STATE OF COLORADO LICENSED LANDSCAPE ARCHITECT

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE PLAN

NO:	ISSUED FOR:	DATE:
1	ADDENDUM #1	4/28/2015

PROJECT STATUS:
100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15
SHEET NO: L101
PROJECT NO: 1443

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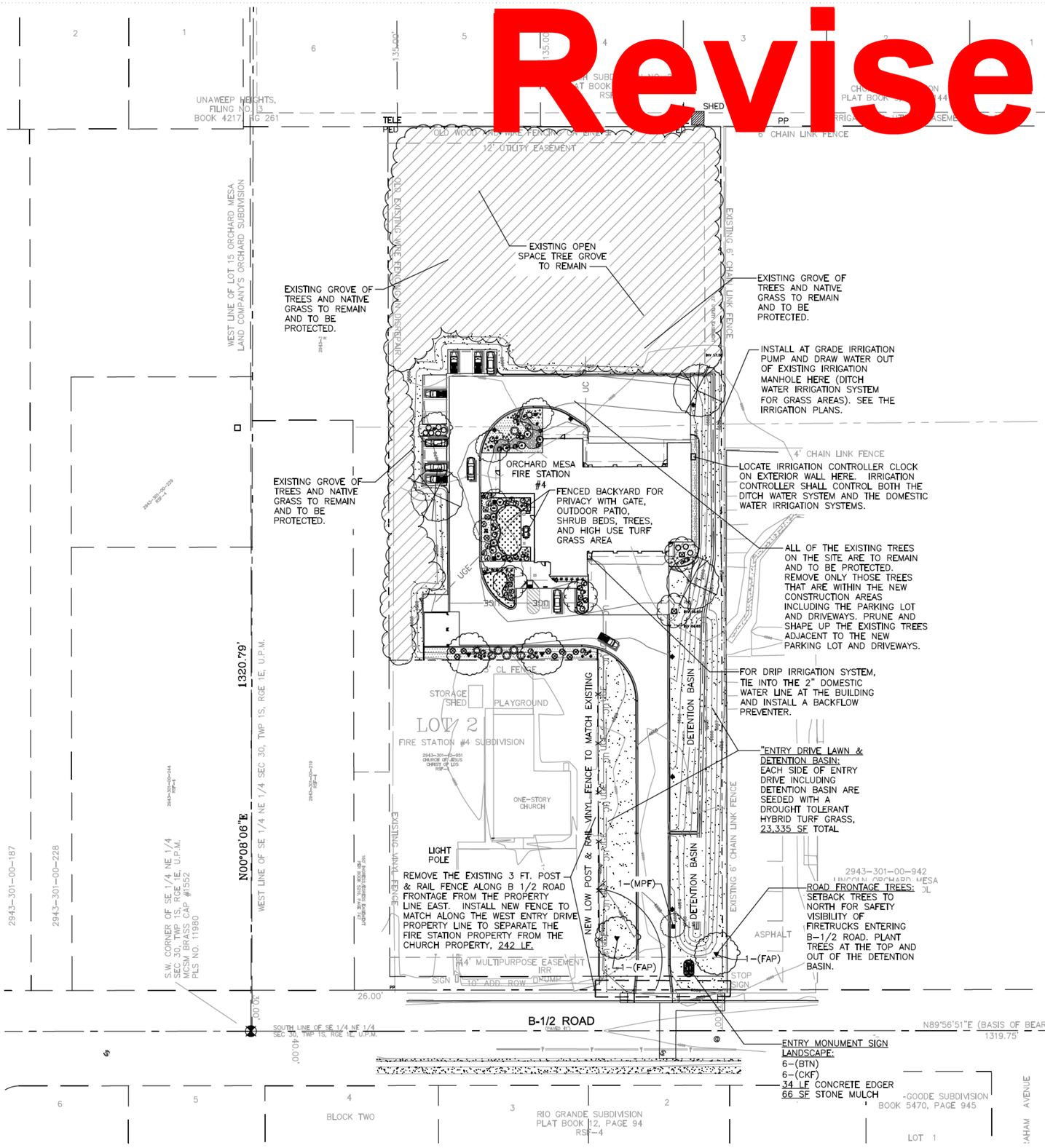
Addendum 1

Revised



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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15
SHEET NO: L101
PROJECT NO: 1443

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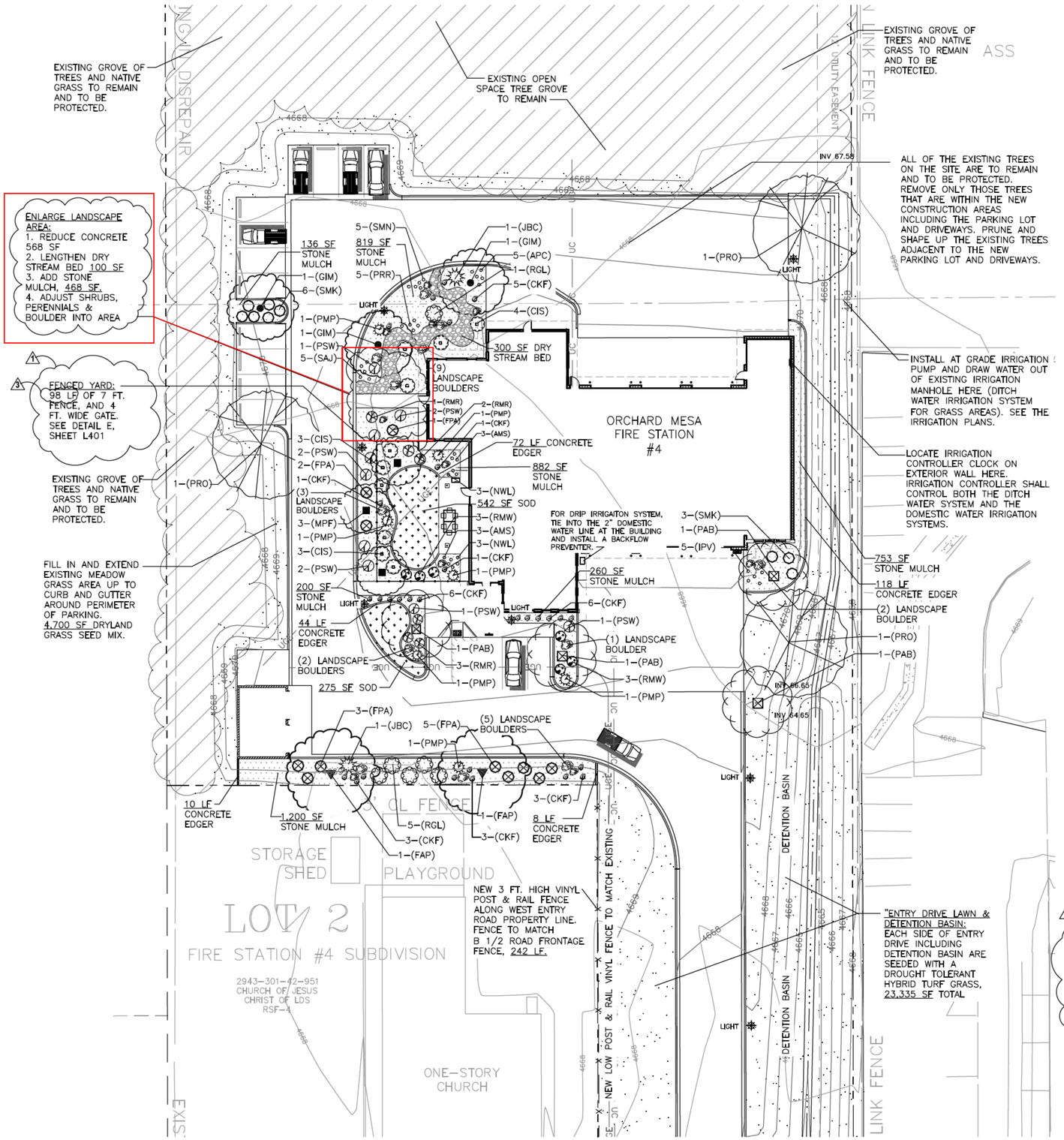

LANDSCAPE NOTES:

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   A. SALT LEVEL EQUAL TO OR LESS THAN 6 MMHOS/EM
   B. pH LEVEL EQUAL TO OR LESS THAN 7
   C. ORGANIC MATTER CONTENT EQUAL TO OR GREATER THAN 85%
   D. NITROGEN: CARBON: BETWEEN 20:1 AND 30:1
   E. PARTICLE SIZE: THE COURSER THE BETTER, NOT SILT OR CLAY SIZE PARTICLES

2. CONTRACTOR TO UTILIZE STOCKPILED TOPSOIL FROM GRADING OPERATION AS AVAILABLE. TILL INTO TOP 6" OF SOIL.

3. FOR GRADING PLAN, REFER TO CIVIL ENGINEER DRAWINGS. ALL TURF GRASS AREAS, BERMS, & SHRUB BEDS DO NOT EXCEED 3:1 SLOPE.

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JULEE WOLVERTON LA - 505 04/7/2098 Original Date of Licensure STATE OF COLORADO LICENSED LANDSCAPE ARCHITECT

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE ENLARGEMENT PLAN

NO:	ISSUED FOR:	DATE:
1	ADDENDUM #1	4/28/2015
2	ADDENDUM #3	6/02/2015
	PROPOSAL #3	6/16/2015

PROJECT STATUS: 100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15 SHEET NO: L201

PROJECT NO: 1443

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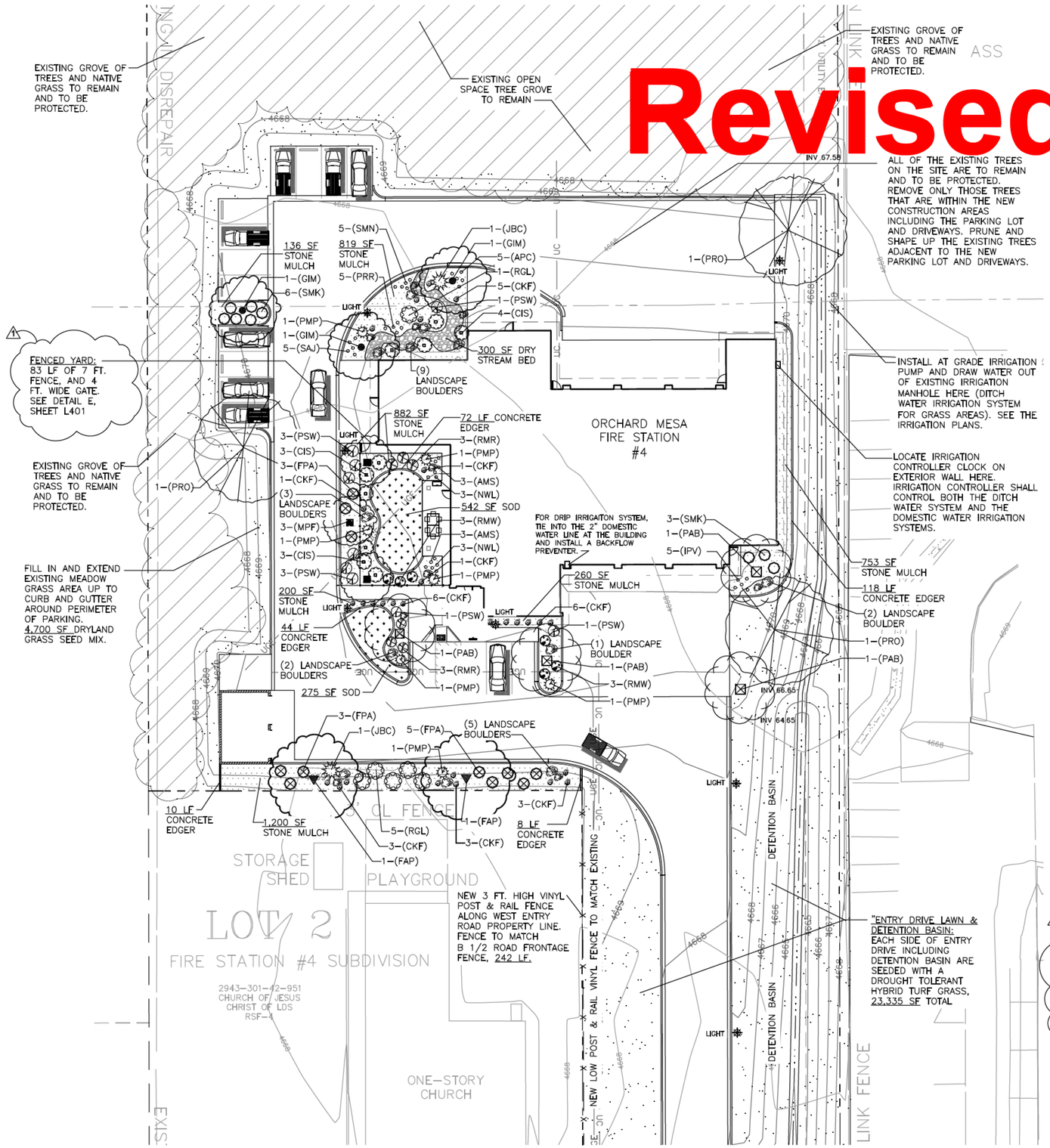

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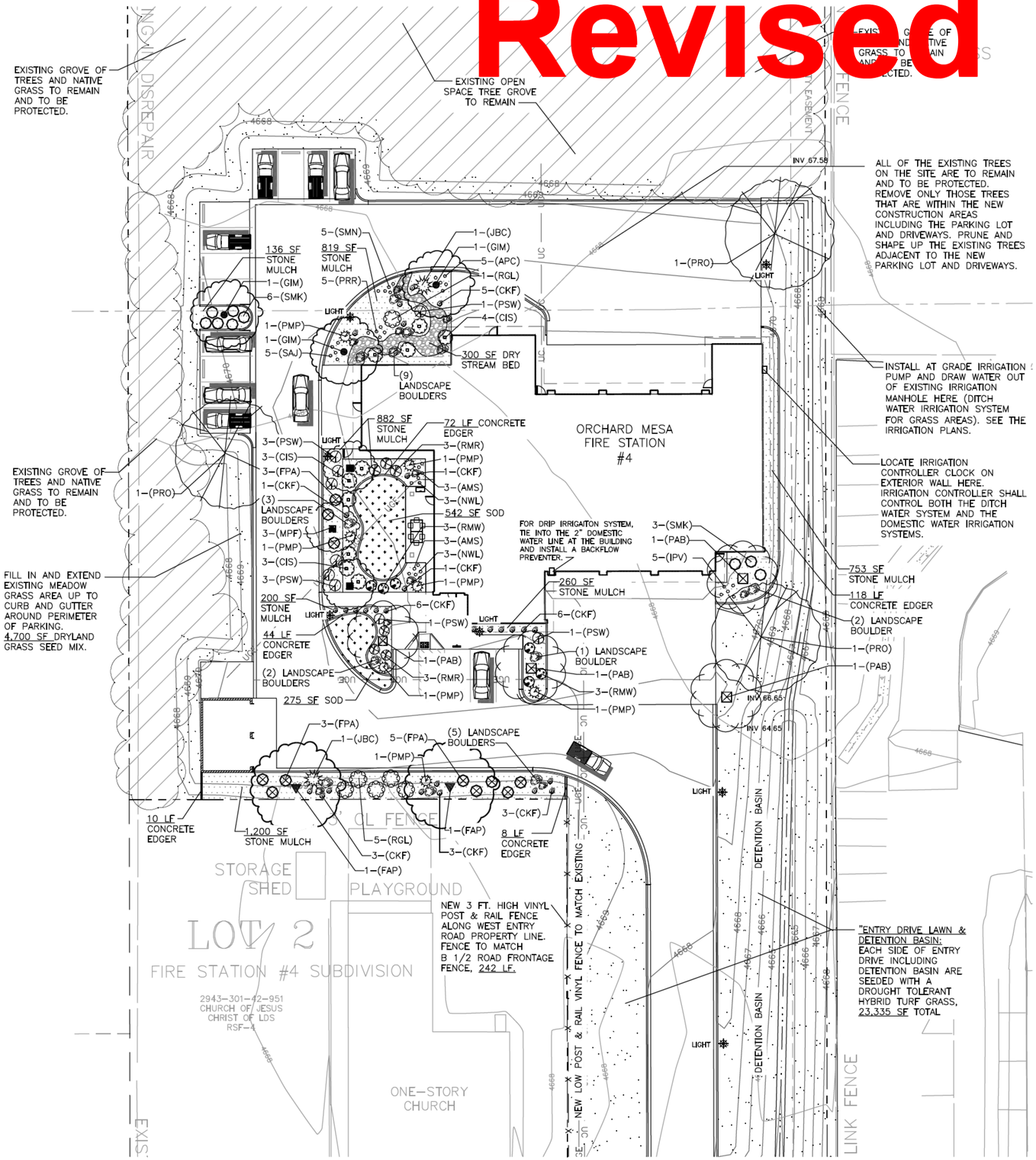

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NORTH

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CITY OF GRAND JUNCTION COMMUNITY DEVELOPMENT
BY: _____ DATE: _____
CITY OF GRAND JUNCTION ENGINEERING
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE ENLARGEMENT PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15 SHEET NO: L201

PROJECT NO: 1443

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PLANT LEGEND: TREES

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(FAP)	FRAXINUS 'AUTUMN PURPLE'	AUTUMN PURPLE ASH	2" CALIPER	4 TOTAL	45' TALL, 30' SPREAD, PURPLE FALL COLOR
	(GIM)	GLEDITSIA TRICANTHOS 'IMPCOLE'	IMPERIAL HONEYLOCUST	2" CALIPER	3 TOTAL	30' TALL, 25' SPREAD, YELLOW FALL COLOR
	(MPF)	MALUS 'PRAIRIE FIRE'	PRAIRIE FIRE CRABAPPLE	2" CALIPER	4 TOTAL	20' TALL, 18' SPREAD, RED PINK SPRING FLOWRS
	(PRO)	POPULUS X ROBUSTA	ROBUSTA COTTONLESS COTTONWOOD	2" CALIPER	3 TOTAL	50' TALL, 30' SPREAD, YELLOW FALL COLOR
	(PAB)	PYRUS 'AUTUMN BLAZE'	AUTUMN BLAZE PEAR (NON-FRUITING VARIETY)	2" CALIPER	4 TOTAL	40' TALL, 25' SPREAD, WHITE FLOWERS, RED FALL

PLANT LEGEND: PERENNIALS

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
○	(AMS)	ACHILLEA 'MOONSHINE'	MOONSHINE YARROW	1 GALLON	6 TOTAL	2' TALL, 2' SPREAD, YELLOW SUMMER FLOWERS
○	(APC)	ARTEMESIA 'POWIS CASTLE'	POWIS CASTLE SAGE	1 GALLON	5 TOTAL	18" TALL, 18" SPREAD, SILVER FOLIAGE
○	(IPV)	IRIS PALLIDA 'VARIEGATED'	VARIEGATED IRIS	1 GALLON	5 TOTAL	12" TALL, 12" SPREAD, VARIEGATED FOLIAGE (PURPLE FLOWER SPIKES TO 2 FT)
○	(NWL)	NEPETA 'WALKER'S LOW'	WALKER'S LOW CATMINT	1 GALLON	6 TOTAL	12" TALL, 18" SPREAD, PURPLE SUMMER
○	(PRR)	PENSTEMON 'RED ROCKS'	RED ROCKS PENSTEMON	1 GALLON	5 TOTAL	12" TALL, 12" SPREAD, PINK SUMMER
○	(SMN)	SALVIA 'MAY NIGHT'	MAY NIGHT SALVIA	1 GALLON	5 TOTAL	12" TALL, 12" SPREAD, BLUE SPRING
○	(SAJ)	SEDUM 'AUTUMN JOY'	AUTUMN JOY STONECROP	1 GALLON	5 TOTAL	18" TALL, 12" SPREAD, RED FALL FLOWERS

PLANT LEGEND: SHRUBS

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(BTN)	BERBERIS THUNBERGII AUTROPURPUREA 'NANA'	CRIMSON PIGMY BARBERRY	5 GALLON	6 TOTAL	2' TALL, 2' SPREAD, RED FOLIAGE
	(CIS)	CORNUS ISANTI	ISANTI DOGWOOD	5 GALLON	10 TOTAL	4' TALL, 4' SPREAD, RED STEMS
	(FPA)	FALLUGIA PARADOXA	APACHE PLUME	5 GALLON	11 TOTAL	4' TALL, 4' SPREAD, WHITE SUMMER FLOWERS
	(JBC)	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	5 GALLON	2 TOTAL	2' TALL, 6' SPREAD, BLUE EVERGREEN
	(PSW)	PHYSOCARPUS 'SUMMERWINE'	SUMMERWINE NINEBARK	5 GALLON	9 TOTAL	4' TALL, 4' SPREAD, PURPLE FOLIAGE
	(PMP)	PINUS MUGO PUMILIO	DWARF MUGO PINE	5 GALLON	7 TOTAL	3' TALL, 4' SPREAD, EVERGREEN SHRUB
	(RGL)	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	5 GALLON	6 TOTAL	3' TALL, 6' SPREAD, GLOSSY FOLIAGE
	(RMR)	ROSA 'MEIDILAND RED'	RED GROUNDCOVER ROSE	5 GALLON	6 TOTAL	2' TALL, 4' SPREAD, RED FLOWERS
	(RMW)	ROSA 'MEIDILAND WHITE'	WHITE GROUNDCOVER ROSE	5 GALLON	6 TOTAL	2' TALL, 4' SPREAD, WHITE FLOWERS
	(SMK)	SYRINGA 'MISS KIM'	MISS KIM LILAC	5 GALLON	9 TOTAL	4' TALL, 4' SPREAD, PURPLE SPRING FLOWERS

PLANT LEGEND: ORNAMENTAL GRASS

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(CKF)	CALAMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	1 GALLON	35 TOTAL	4' TALL, 2' SPREAD, ORNAMENTAL GRASS

SITE LEGEND: STONE MULCH, EDGER, GRASS, LANDSCAPE BOULDER

SYM.	DESCRIPTION:	QUANTITY:	REMARKS:
	SHREDDED CEDAR BARK MULCH	300 SF	PLACE 3" DEPTH UNDER DRIPLINE OF EACH PLANT. 2 FT DIAMETER AROUND BASE OF TREES, 1 FT. DIAMETER AROUND BASE OF SHRUBS, PERENNIALS, AND ORNAMENTAL GRASSES. BARK MULCH SHALL BE OFFSET FROM PLANT TRUNK A MINIMUM OF 2" NO TOUCH.
	TURF GRASS SOD	817 SF	LOCALLY AVAILABLE TURF GRASS SOD. INSTALL PER THE SUPPLIER RECOMMENDATIONS. PREPARE SOIL WITH 5 CY SOIL CONDITONER/1,000 SF. ROTOTILL AND FINE GRADE. INSTALL SOD JOINTS TIGHT, ROLL SOD TO ASSURE CONTACT WITH SOIL.
	TURF GRASS SEED (DROUGHT TOLERANT TURF)	28,035 SF	"HERCULES TURF BLEND" TURF GRASS MIXTURE AS AVAILABLE THRU SPENCERSGARDENS.COM. SEED AT THE RATE RECOMMENDED BY THE SUPPLIER FOR 100% COVERAGE. (DENSE, SHORT, DROUGHT TOLERANT, LOW MAINTENANCE, & LOOKS LIKE TURF)
	3/4" SCREENED TAN GRANITE (DESERT SWIRL)	4,316 SF + 468 SF	PLACE 3" DEEP (NO LANDSCAPE FABRIC)
	4"-10" COBBLE DRY STREAM BED	300 SF + 100 SF	MEANDER IN WIDTH AND DIRECTION. INSTALL PER THE DETAIL SHOWN ON SHEET L401.
	4"X6" EXTRUDED CONCRETE LANDSCAPE EDGER	286 LF	EXTRUDED 4"X6" CONCRETE LANDSCAPE EDGER. SEE THE DETAIL ON SHEET L401.
	LANDSCAPE BOULDER	11 MEDIUM 11 LARGE	BURY 2" DEPTH, SEE THE DETAIL ON SHEET L401 FOR TYPE, SIZES, AND INSTALLATION.
	3 FT. HIGH POST AND RAIL WHITE VINYL FENCE TO MATCH EXISTING	242 LF	INSTALL BY FENCE CONTRACTOR PER INDUSTRY STANDARDS.
	7 FT. HIGH COMMERCIAL GRADE DECORATIVE FENCE AND 4 FT. WIDE PEDESTRIAN GATE., BLACK COLOR	98 LF	AMERISTAR MFG. 7 FT. MONTAGE COMMERICAL CLASSIC 3/4 RAIL, BLACK COLOR. INSTALL BY FENCE CONTRACTOR PER THE MFG. SPECS AND THE DETAIL ON SHEET L401.

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Original Date of Licensure
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE LEGENDS

NO:	ISSUED FOR:	DATE:
1	ADDENDUM #1	4/28/2015
2	ADDENDUM #3	6/02/2015
3	PROPOSAL #3	6/16/2015

PROJECT STATUS:
100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15 SHEET NO: L301

PROJECT NO: 1443

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PR 03

Revised

PLANT LEGEND: TREES

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(FAP)	FRAXINUS 'AUTUMN PURPLE'	AUTUMN PURPLE ASH	2" CALIPER	4 TOTAL	45' TALL, 30' SPREAD, PU… …OLOR
	(GIM)	GLEDITSIA TRICANTHOS 'IMPCOLE'	IMPERIAL HONEYLOCUST	2" CALIPER	3 TOTAL	30' TALL, 25' SPREAD, YELLOW FALL COLOR
	(MPF)	MALUS 'PRAIRIE FIRE'	PRAIRIE FIRE CRABAPPLE	2" CALIPER	4 TOTAL	20' TALL, 18' SPREAD, RED PINK SPRING FLOWRS
	(PRO)	POPULUS X ROBUSTA	ROBUSTA COTTONLESS COTTONWOOD	2" CALIPER	3 TOTAL	50' TALL, 30' SPREAD, YELLOW FALL COLOR
	(PAB)	PYRUS 'AUTUMN BLAZE'	AUTUMN BLAZE PEAR (NON-FRUITING VARIETY)	2" CALIPER	4 TOTAL	40' TALL, 25' SPREAD, WHITE FLOWERS, RED FALL

PLANT LEGEND: PERENNIALS

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(HS)	…EA '…	…OONSHINE YARROW	1 GALLON	6 TOTAL	2' TALL, 2' SPREAD, YELLOW SUMMER FLOWERS
	(…C)	…ESIA '… …STLE'	…OWIS CASTLE SAGE	1 GALLON	5 TOTAL	18" TALL, 18" SPREAD, SILVER FOLIAGE
○	(IPV)	IRIS PALLIDA 'VARIEGATED'	VARIEGATED IRIS	1 GALLON	5 TOTAL	12" TALL, 12" SPREAD, VARIEGATED FOLIAGE (PURPLE FLOWER SPIKES TO 2 FT)
○	(NWL)	NEPETA 'WALKER'S LOW'	WALKER'S LOW CATMINT	1 GALLON	6 TOTAL	12" TALL, 18" SPREAD, PURPLE SUMMER
○	(PRR)	PENSTEMON 'RED ROCKS'	RED ROCKS PENSTEMON	1 GALLON	5 TOTAL	12" TALL, 12" SPREAD, PINK SUMMER
○	(SMN)	SALVIA 'MAY NIGHT'	MAY NIGHT SALVIA	1 GALLON	5 TOTAL	12" TALL, 12" SPREAD, BLUE SPRING
○	(SAJ)	SEDUM 'AUTUMN JOY'	AUTUMN JOY STONECROP	1 GALLON	5 TOTAL	18" TALL, 12" SPREAD, RED FALL FLOWERS

PLANT LEGEND: SHRUBS

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(BTN)	BERBERIS THUNBERGII AUTROPURPUREA 'NANA'	CRIMSON PIGMY BARBERRY	5 GALLON	6 TOTAL	2' TALL, 2' SPREAD, RED FOLIAGE
	(CIS)	CORNUS ISANTI	ISANTI DOGWOOD	5 GALLON	10 TOTAL	4' TALL, 4' SPREAD, RED STEMS
	(FPA)	FALLUGIA PARADOXA	APACHE PLUME	5 GALLON	11 TOTAL	4' TALL, 4' SPREAD, WHITE SUMMER FLOWERS
	(JBC)	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	5 GALLON	2 TOTAL	2' TALL, 6' SPREAD, BLUE EVERGREEN
	(PSW)	PHYSOCARPUS 'SUMMERWINE'	SUMMERWINE NINEBARK	5 GALLON	9 TOTAL	4' TALL, 4' SPREAD, PURPLE FOLIAGE
	(PMP)	PINUS MUGO PUMILIO	DWARF MUGO PINE	5 GALLON	7 TOTAL	3' TALL, 4' SPREAD, EVERGREEN SHRUB
	(RGL)	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	5 GALLON	6 TOTAL	3' TALL, 6' SPREAD, GLOSSY FOLIAGE
	(RMR)	ROSA 'MEIDILAND RED'	RED GROUNDCOVER ROSE	5 GALLON	6 TOTAL	2' TALL, 4' SPREAD, RED FLOWERS
	(RMW)	ROSA 'MEIDILAND WHITE'	WHITE GROUNDCOVER ROSE	5 GALLON	6 TOTAL	2' TALL, 4' SPREAD, WHITE FLOWERS
	(SMK)	SYRINGA 'MISS KIM'	MISS KIM LILAC	5 GALLON	9 TOTAL	4' TALL, 4' SPREAD, PURPLE SPRING FLOWERS

PLANT LEGEND: ORNAMENTAL GRASS

SYM.	SYM.	BOTANICAL NAME:	COMMON NAME:	SIZE:	QUANTITY:	REMARKS:
	(CKF)	CALAMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	1 GALLON	35 TOTAL	4' TALL, 2' SPREAD, ORNAMENTAL GRASS

SITE LEGEND: STONE MULCH, EDGER, GRASS, LANDSCAPE BOULDER

SYM.	DESCRIPTION:	QUANTITY:	REMARKS:
	SHREDDED CEDAR BARK MULCH	300 SF	PLACE 3" DEPTH UNDER DRIPLINE OF EACH PLANT. 2 FT DIAMETER AROUND BASE OF TREES, 1 FT. DIAMETER AROUND BASE OF SHRUBS, PERENNIALS, AND ORNAMENTAL GRASSES. BARK MULCH SHALL BE OFFSET FROM PLANT TRUNK A MINIMUM OF 2" NO TOUCH.
	TURF GRASS SOD	817 SF	LOCALLY AVAILABLE TURF GRASS SOD. INSTALL PER THE SUPPLIER RECOMMENDATIONS. PREPARE SOIL WITH 5 CY SOIL CONDITONER/1,000 SF. ROTOTILL AND FINE GRADE. INSTALL SOD JOINTS TIGHT, ROLL SOD TO ASSURE CONTACT WITH SOIL.
	TURF GRASS SEED (DROUGHT TOLERANT TURF)	28,035 SF	"HERCULES TURF BLEND" TURF GRASS MIXTURE AS AVAILABLE THRU SPENCERSGARDENS.COM. SEED AT THE RATE RECOMMENDED BY THE SUPPLIER FOR 100% COVERAGE. (DENSE, SHORT, DROUGHT TOLERANT, LOW MAINTENANCE, & LOOKS LIKE TURF)
	3/4" SCREENED TAN GRANITE (DESERT SWIRL)	4,316 SF	PLACE 3" DEEP (NO LANDSCAPE FABRIC)
	4"-10" COBBLE DRY STREAM BED	300 SF	MEANDER IN WIDTH AND DIRECTION. INSTALL PER THE DETAIL SHOWN ON SHEET L401.
	4"X6" EXTRUDED CONCRETE LANDSCAPE EDGER	286 LF	EXTRUDED 4"X6" CONCRETE LANDSCAPE EDGER. SEE THE DETAIL ON SHEET L401.
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	7 FT. HIGH COMMERCIAL GRADE DECORATIVE FENCE AND 4 FT. WIDE PEDESTRIAN GATE., BLACK COLOR	LF	AMERISTAR MFG. 7 FT. MONTAGE COMMERICAL CLASSIC 3/4 RAIL, BLACK COLOR. INSTALL BY FENCE CONTRACTOR PER THE MFG. SPECS AND THE DETAIL ON SHEET L401.

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LA - 505
04/17/2098
Julee Wolverton
Original Date of Licensure
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LICENSED LANDSCAPE ARCHITECT

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE LEGENDS

NO:	ISSUED FOR:	DATE:
1	ADDENDUM #1	4/28/2015

PROJECT STATUS:
100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15

SHEET NO: L301

PROJECT NO: 1443

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Addendum 1

Revised

PLANT LEGEND: TREES

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×——×	3 FT. HIGH POST AND RAIL WHITE VINYL FENCE TO MATCH EXISTING	242 LF	INSTALL BY FENCE CONTRACTOR PER INDUSTRY STANDARDS.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE LEGENDS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15

SHEET NO: L301

PROJECT NO: 1443

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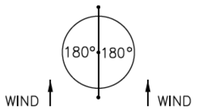
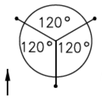
Revised



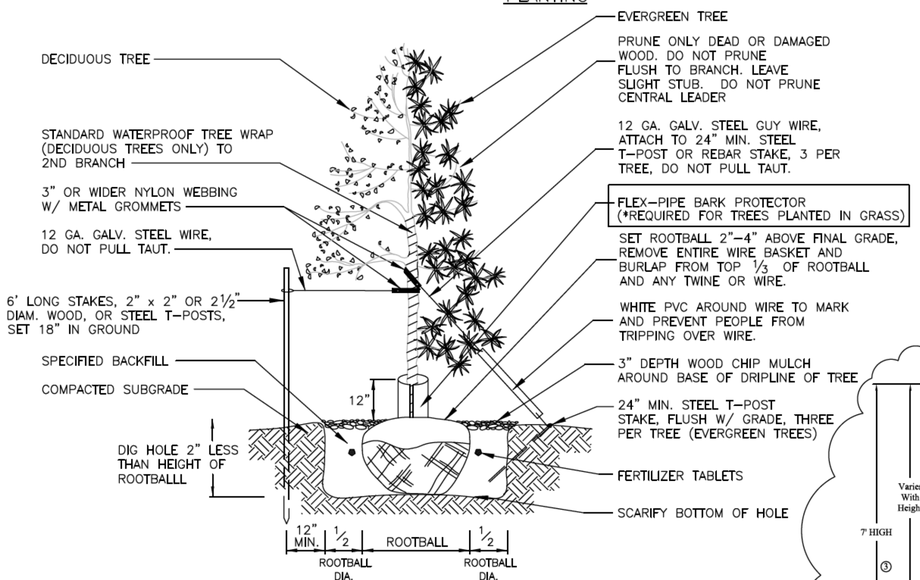
GUYING PATTERN FOR DECIDUOUS TREE PLANTING



FOR TREES ON 4:1 OR STEEPER SLOPES, PLACE 2 GUYS UPSLOPE, ONE DOWNSLOPE; OTHERWISE PLACE FOR PREVAILING WIND.

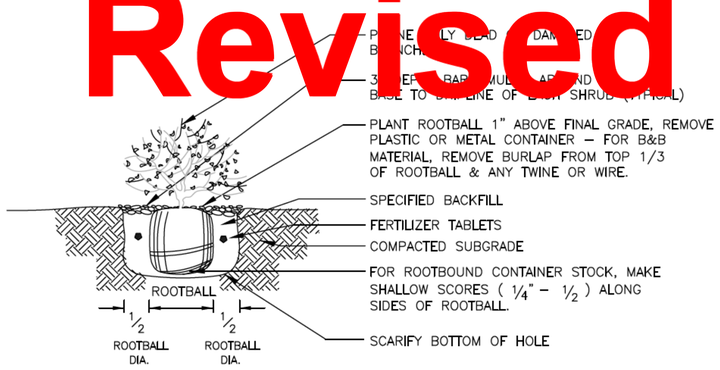
GUYING PATTERN FOR EVERGREEN TREE PLANTING

ALL TREES REQUIRE (3) BUBBLERS PER TREE



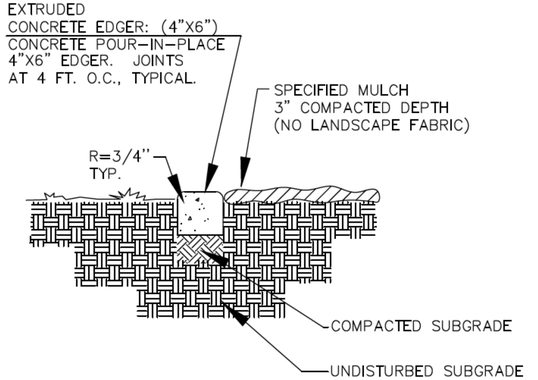
A L401 TREE PLANTING SECTION

NOT TO SCALE



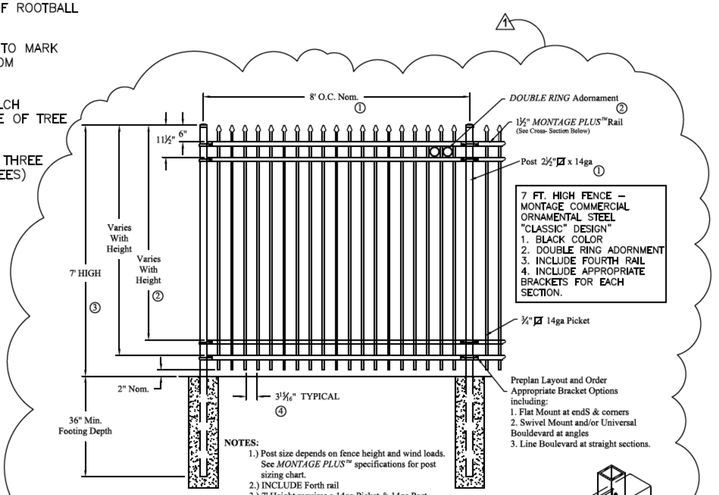
B L401 SHRUB & PERENNIAL PLANTING SECTION

NOT TO SCALE



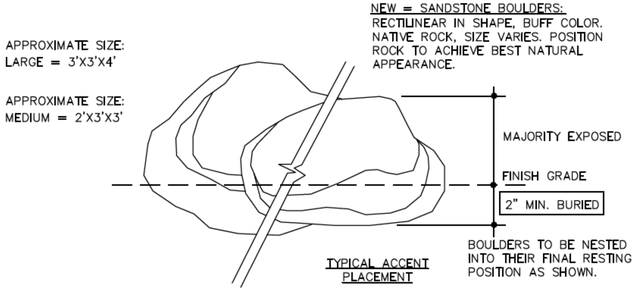
C L401 CONCRETE EDGER / STONE MULCH

NOT TO SCALE



E L401 7 FT. COMMERCIAL GRADE DECORATIVE FENCE

NOT TO SCALE



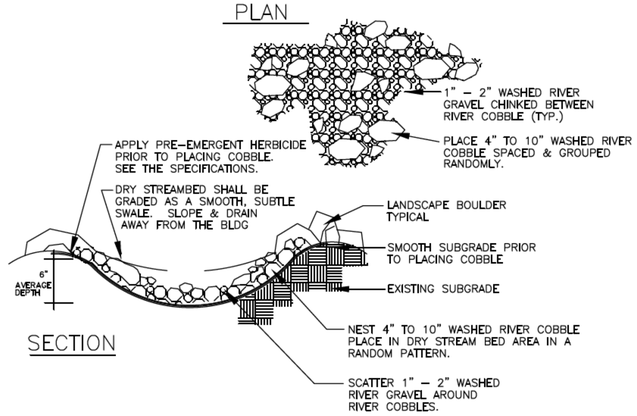
1. PLACEMENT OF LANDSCAPE BOULDERS REFERS TO BOULDERS PLACED IN THE GROUND 2" MIN BURIED BELOW GRADE AND REMAINDER EXPOSED ABOVE FINISH GRADE, TYPICAL.

2. CARE SHALL BE TAKEN DURING PLACEMENT AND HANDLING TO AVOID UNNATURAL SCARRING OF THE EXPOSED SURFACE.

D L401 LANDSCAPE BOULDERS

NOT TO SCALE

PLAN



SECTION

NOTE:
1. WIDTH OF DRY STREAM BED SHALL VARY IN WIDTH FROM APPROX. 3 FT. WIDE MIN. TO 6 FT. WIDE MAX.

2. LANDSCAPE BOULDERS SHALL BE NESTED IN GROUPS IN A RANDOM FASHION ALONG THE EDGES AND THROUGHOUT THE DRY STREAM BED AS SHOWN ON THE DWGS.

3. APPLY A PRE-EMERGENT HERBICIDE THROUGHOUT STREAM BED AREA BEFORE PLACEMENT OF COBBLE (TYP.)

4. INSTALL DRY STREAM BED TO LOOK AS NATURAL AS POSSIBLE WITH VARYING ROCK SIZES, GROUPINGS OF BOULDERS, AND VARYING WIDTH. LANDSCAPE ARCHITECT MUST APPROVE LAYOUT.

F L401 DRY STREAM BED DETAIL

NOT TO SCALE

Julee Wolverton, Landscape Architect

61945 Nighthawk Road
Montrose, CO 81403
p: 970.249.9392
c: 970.417.1779
wolverton@montrose.net

CITY OF GRAND JUNCTION COMMUNITY DEVELOPMENT

BY:_____ DATE:_____

CITY OF GRAND JUNCTION ENGINEERING

APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.

BY:_____ DATE:_____

ACCEPTED AS CONSTRUCTED

BY:_____ DATE:_____

"All details, construction, inspections, and testing shall conform to the City of Grand Junction Standard Contract Documents for Capital Improvements Construction. Contractor shall have a copy of the accepted plans and current City of Grand Junction Standard Documents for Capital Improvements Construction on site and available at all times."

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725 Saint Joseph St., Suite B1
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www.chamberlinarchitects.com

JULEE WOLVERTON LA - 505 04/7/2008 Julee Wolverton Original Date of Licensure STATE OF COLORADO LICENSED LANDSCAPE ARCHITECT

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE DETAILS

ISSUED FOR:	DATE:
ADDENDUM #1	4/28/2015

PROJECT STATUS: 100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE: 04-10-15 SHEET NO: L401

PROJECT NO: 1443

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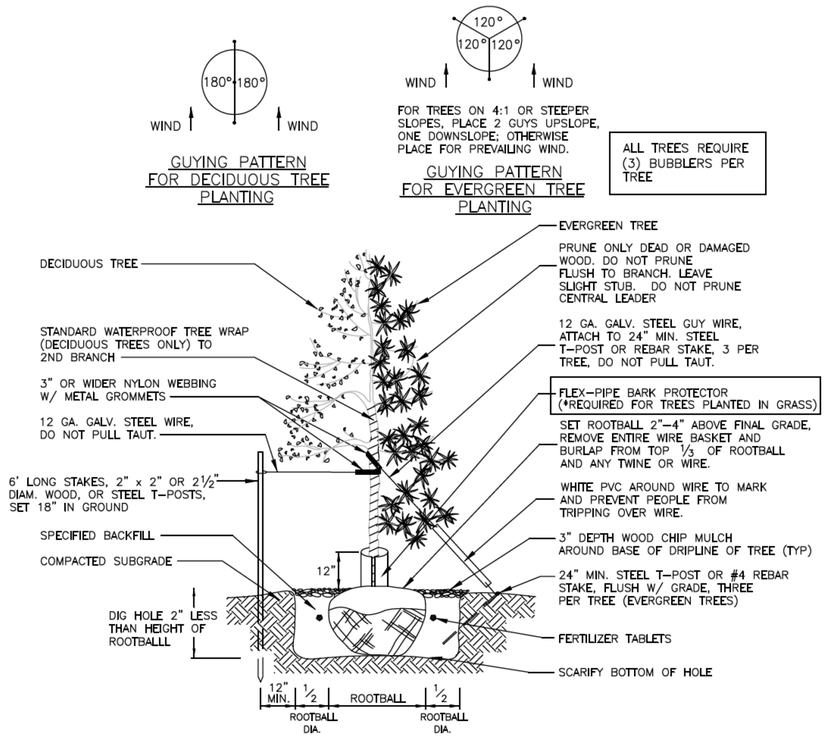
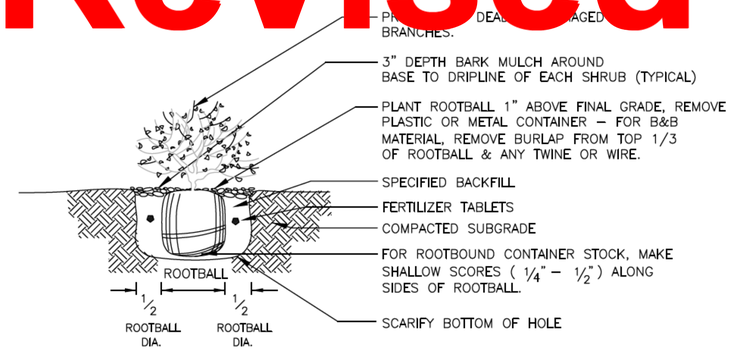
Addendum 1

Revised



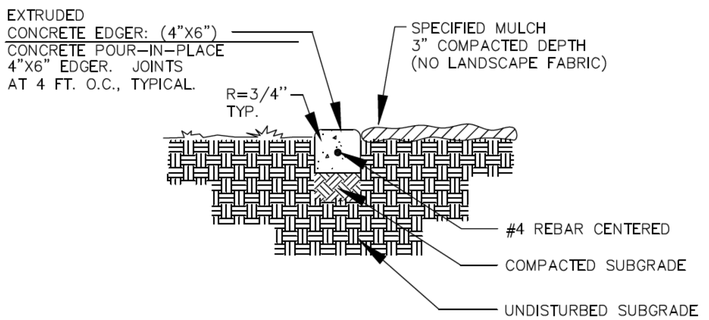
A L401 TREE PLANTING SECTION

NOT TO SCALE



B L401 SHRUB & PERENNIAL PLANTING SECTION

NOT TO SCALE



C L401 CONCRETE EDGER / STONE MULCH

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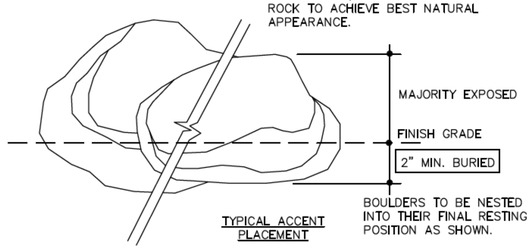

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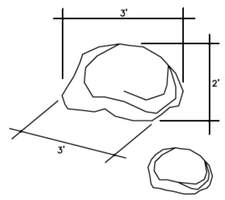


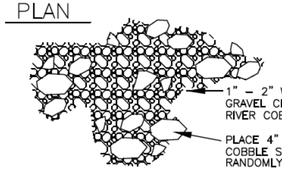
APPROXIMATE SIZE:
LARGE = 3'X3'X4'

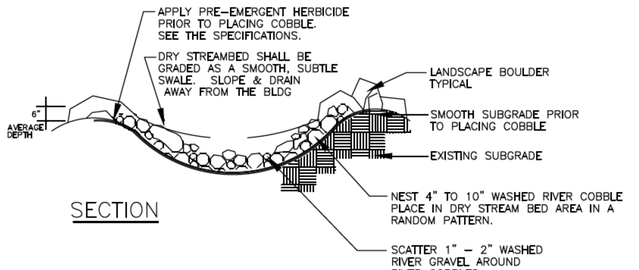
APPROXIMATE SIZE:
MEDIUM = 2'X3'X3'

D L401 LANDSCAPE BOULDERS

NOT TO SCALE

PLAN





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CITY OF GRAND JUNCTION ENGINEERING

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BY:_____ DATE:_____

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BY:_____ DATE:_____

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LANDSCAPE DETAILS

ISSUED FOR: DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: JW CHECKED BY: JW

DATE:
04-10-15

SHEET NO:
L401

PROJECT NO:
1443

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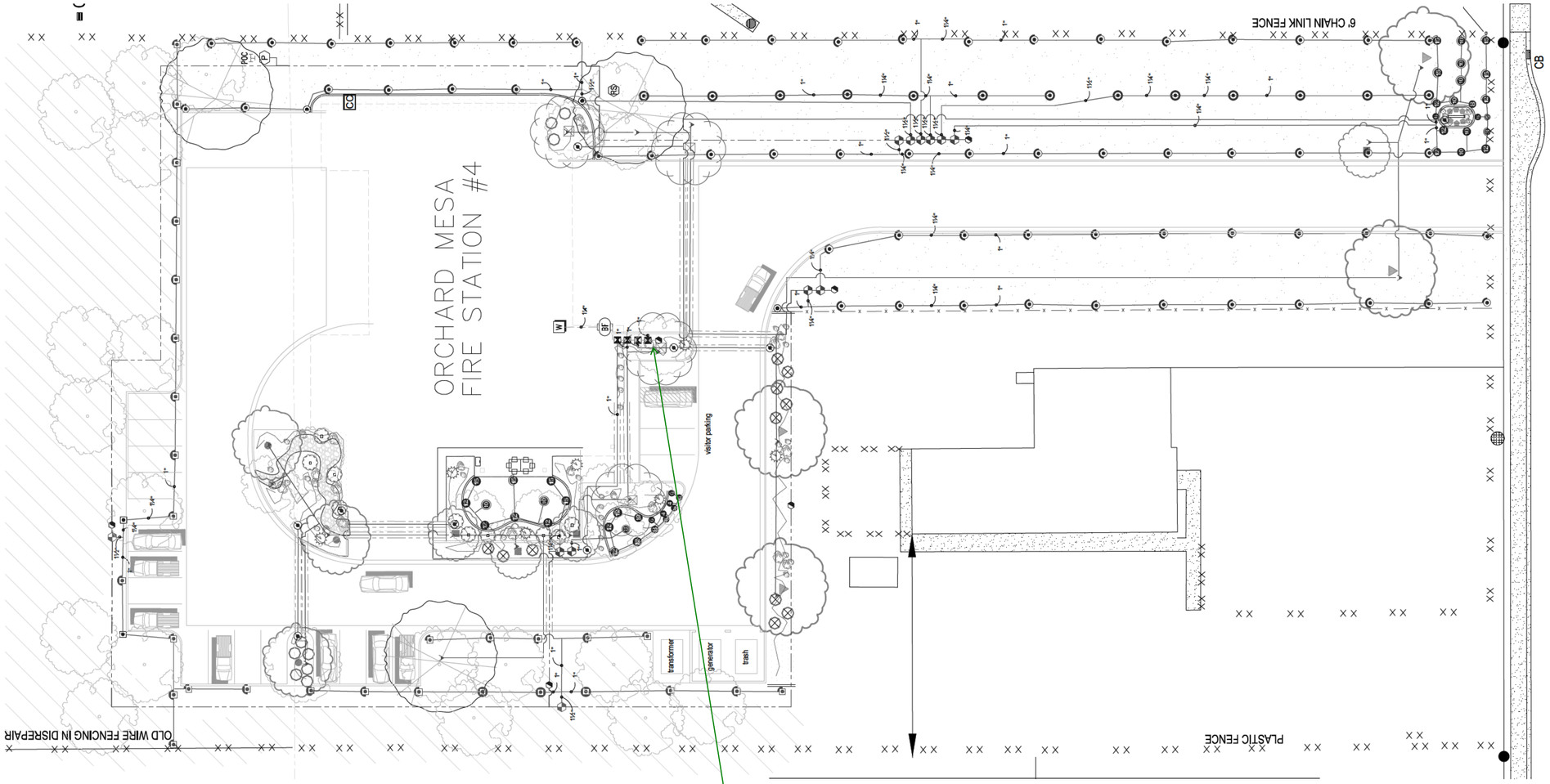

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION PLAN

NO:	ISSUED FOR:	DATE:

NORTH

Scale: 1" = 20'-0"

0 20 40 60

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: 04-29-2015 SHEET NO: IR101

PROJECT NO: 1443
2015-0002

Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date:	Designed By:
04-29-2015	B.G.V.
Drawing Number: 2015-0002	Checked By: J.J.S.

JOHN J. STEUBLE CERTIFIED IRRIGATION DESIGNER COMMERCIAL 0051105

FCI Constructors, Inc.

Request for Information 008R1

Detailed, RFIs Grouped by RFI Number

Grand Junction Fire Station #4 2884 B 1/2 Road, Grand Junction, CO 81503	Project # 16-16-068 Tel: 970-256-1214 Fax: 970-434-7583	FCI Constructors, Inc. - GJ

RFI #: 00851 Date Created: 6/30/2015

Answer Company	Answered By	Author Company	Authored By
		FCI Constructors, Inc. - GJ P. O. Box 1767 Grand Junction, CO 81502	Adam Shuler

Co-Respondent | Author RFI Number

Subject	Discipline	Category
Location of Irrigation Backflow Preventer	Landscaping	Clarification and Approval

Cc: Company Name	Contact Name	Copies	Notes
FCI Constructors, Inc. - GJ	Craig Reid	1	
FCI Constructors, Inc. - GJ	Stan Kiser	1	
City of Grand Junction	Lee Cooper	1	

Question: Date Required: 7/7/2015

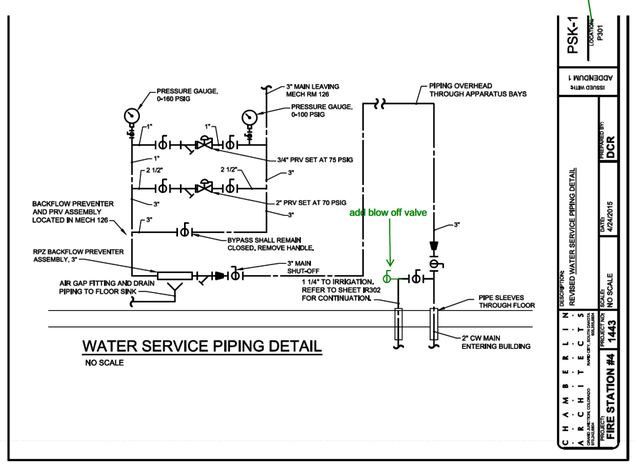
RE: IR101, C6
Attached is a revised sketch to show the proposed installation of the irrigation line with a blow out at the interior of the building. This configuration will need no valve box in the drive outside.

Suggestion

Answer: Date Answered:

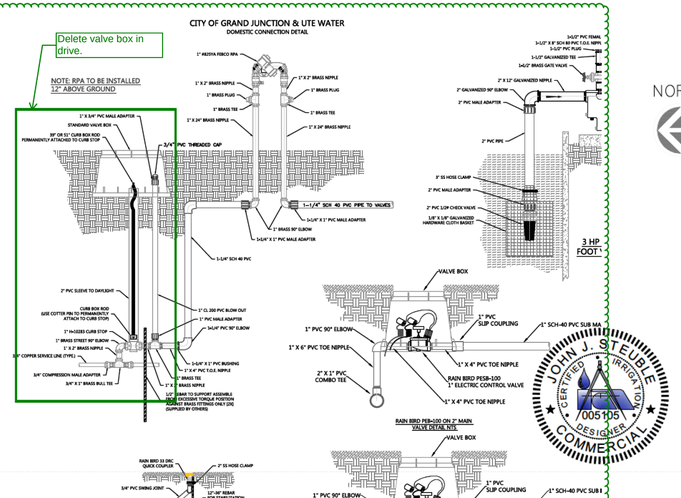
For documentation only.

Printed on: 6/30/2015 10 pm data Page 1 of 1

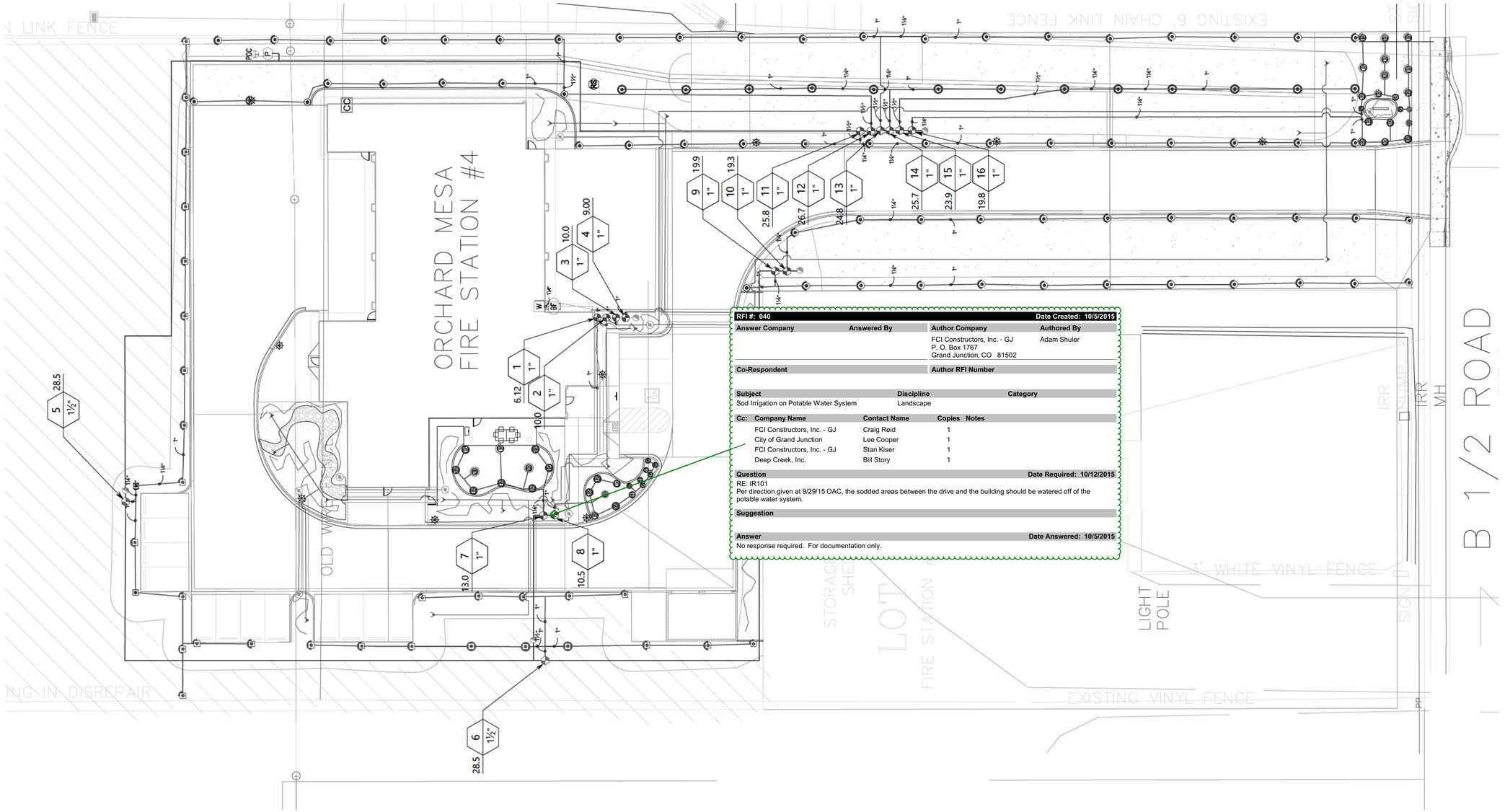


WATER SERVICE PIPING DETAIL
NO SCALE

PSK-1	TOPO
ADDENDUM 1	ISSUED WITH
REVISED WATER SERVICE PIPING DETAIL	DRAWN BY: DCR
CHAMBERLIN ARCHITECTS	DATE: 4/24/2015
FIRE STATION #4 1443	SCALE: NO SCALE



Addendum 2



RFI #: 040 — **Date Created: 10/5/2015**

Answer Company	Answered By	Author Company	Authored By
		FCI Constructors, Inc. - GJ P. O. Box 1767 Grand Junction, CO 81502	Adam Shuler

Co-Respondent | **Author RFI Number**

Subject	Discipline	Category
Sod Irrigation on Potable Water System	Landscape	

Cc:	Company Name	Contact Name	Copies	Notes
	FCI Constructors, Inc. - GJ	Craig Reid	1	
	City of Grand Junction	Lee Cooper	1	
	FCI Constructors, Inc. - GJ	Stan Kiser	1	
	Deep Creek, Inc.	Bill Story	1	

Question — **Date Required: 10/12/2015**

RE: IR101
Per direction given at 9/29/15 OAC, the sodded areas between the drive and the building should be watered off of the potable water system.

Suggestion

Answer — **Date Answered: 10/5/2015**

No response required. For documentation only.

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK		GAL./WEEK		GAL./DAY				
1	Rain Bird PGA-PRS-D- Globe		SHRUB AREA FOR DRIP EMITTERS - LOW DENSITY						0.30 in/h	1.40	280	1,713	856.5
2	Rain Bird PGA-PRS-D- Globe		Bubbler	30.64 in/h	1.40	3	30	15					
3	Rain Bird PGA-PRS-D- Globe		SHRUB AREA FOR DRIP EMITTERS - LOW DENSITY						0.30 in/h	1.40	280	1,925	962.4
4	Rain Bird PGA-PRS-D- Globe		Bubbler	30.64 in/h	1.40	3	27	13.5					
5	Rain Bird PESB (2)	Turf Rotary	0.41 in/h	1.40	207	5,897	2,948						
6	Rain Bird PESB (2)	Turf Rotary	0.51 in/h	1.40	167	4,758	2,379						
7	Rain Bird PESB (2)	Turf Spray	1.85 in/h	1.40	46	548.6	182.9						
8	Rain Bird PESB (2)	Turf Spray	2.71 in/h	1.40	31	333.9	111.3						
9	Rain Bird PESB (2)	Turf Rotary	0.36 in/h	1.40	235	4,686	2,343						
10	Rain Bird PESB (2)	Turf Rotary	0.34 in/h	1.40	245	4,733	2,367						
11	Rain Bird PESB (2)	Turf Rotary	0.36 in/h	1.40	235	6,054	3,027						
12	Rain Bird PESB (2)	Turf Rotary	0.56 in/h	1.40	150	4,001	2,000						
13	Rain Bird PESB (2)	Turf Rotary	0.35 in/h	1.40	243	6,036	3,018						
14	Rain Bird PESB (2)	Turf Rotary	0.32 in/h	1.40	264	6,782	3,391						
15	Rain Bird PESB (2)	Turf Rotary	0.35 in/h	1.40	238	5,679	2,839						
TOTALS:			2,627	53,203	26,455								

NORTH

Scale: 1" = 20'–0"

0 20 40 60

Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date:	Designed By:
04-10-2015	B.G.V.
Drawing Number:	Checked By:
2015-0002	J.J.S.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: 04-10-2015 SHEET NO:

PROJECT NO: 1443 2015-0002

IR101

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IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	ARC
6	Rain Bird 1804-SAM-PRS 5 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	1	180
8	Rain Bird 1804-SAM-PRS 8 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	1	360
8	Rain Bird 1804-SAM-PRS 8 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	1	180
10	Rain Bird 1804-SAM-PRS 10 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	4	360
10	Rain Bird 1804-SAM-PRS 10 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	180
12	Rain Bird 1804-SAM-PRS 12 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	4	90
15	Rain Bird 1804-SAM-PRS 15 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	3	180
15	Rain Bird 1804-SAM-PRS 15 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	90
4	Rain Bird 1804-SAM-PRS VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	Adj
6	Rain Bird 1804-SAM-PRS VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	7	Adj
8	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	Adj
8	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	Adj
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15	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	3	Adj
	Rain Bird R-VAN-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Hand Adjustable Rotary Stream, w/RD-1800 turf spray body, 4.0" Pop-Up. With Seal-A-Matic Check Valve and 45 psi in-stem pressure regulation.	3	CST
	Rain Bird R-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 4.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	13	360
	Rain Bird R-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 4.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	58	180
	Rain Bird R-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 4.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	4	90
	Rain Bird R-VAN-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Hand Adjustable Rotary Stream, w/RD-1800 turf spray body, 6.0" Pop-Up. With Seal-A-Matic Check Valve and 45 psi in-stem pressure regulation.	2	CST
	Rain Bird R-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	3	360
	Rain Bird R-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	18	180
	Rain Bird R-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	8	90
	Rain Bird 1804-SAM-PRS With Hunter PCN-25 Bubbler Nozzles 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	18	360

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	1" PVC Pipe Transition Point above grade Pipe transition point from PVC lateral to drip tubing with riser to above grade installation.	9
	3/4" Drip Tube	678.9 l.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-100-PRB-LC 1" Medium Plus Flow Drip Control Kit, for Light Commercial Uses. 1" PGA Valve, with 1" Pressure Regulating 40psi Basket Filter. 5gpm to 20gpm.	4
	Rain Bird PESB (2) 1" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	10
	Rain Bird PESB (2) 1-1/2" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	2
	Rain Bird 33-DLRC 3/4" 3/4" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, Double Track Key Lug, and 2-Piece Body.	6
BF	Febco 825YA 1" Reduced Pressure Backflow Preventer	1
CC	Rain Bird ESP4-SMTE with (2) ESP-SM6 Moudules Outdoor Smart Modular Control System for Residential and Light Commercial Use. Wall Mount, Tipping Bucket Rain Sensor that Measures Rainfall.	1
RS	Rain Bird Rain Sensor With Rainfall and Temperature Data	1
P	MUNRO LP200B 2-HP Irrigation Pump	1
POC	Irrigation Water Point Of Connection (Existing Irrigation Manhole)	1
W	2" Domestic Water Supply Line (Tap Location For Domestic System)	1
	Irrigation Lateral Line: PVC Class 200 SDR 21 1" PVC Class 200 irrigation pipe.	2,240 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/4" PVC Class 200 irrigation pipe.	460 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/2" PVC Class 200 irrigation pipe.	300 l.f.
	Irrigation Lateral Line: PVC Schedule 40 PVC Class 200 irrigation pipe.	1500 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21 2" PVC Class 200 irrigation pipe.	1100 l.f.
	Irrigation Mainline: PVC Schedule 40 1 1/4"	100 l.f.
	Pipe Sleeve: PVC Schedule 80 4" or 2" Sch-40 Sleeving	440 l.f.

Valve Callout
Valve Number
Valve Flow
Valve Size

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION LEGEND

NO:	ISSUED FOR:	DATE:

JOHN J. STEUBLE CERTIFIED IRRIGATION DESIGNER 005105 COMMERCIAL

GJ pipe
Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date: 04-29-2015	Designed By: B.G.V.
Drawing Number: 2015-0002	Checked By: J.J.S.

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: 04-29-2015

PROJECT NO: 1443
2015-0002

SHEET NO: **IR201**

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Addendum 2

IRRIGATION SCHEDULE

Revised

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	ARC
6	Rain Bird 1804-SAM-PRS 5 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	1	180
8	Rain Bird 1804-SAM-PRS 8 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	1	360
8	Rain Bird 1804-SAM-PRS 8 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	1	180
10	Rain Bird 1804-SAM-PRS 10 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	4	360
10	Rain Bird 1804-SAM-PRS 10 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	180
12	Rain Bird 1804-SAM-PRS 12 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	4	90
15	Rain Bird 1804-SAM-PRS 15 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	3	180
15	Rain Bird 1804-SAM-PRS 15 Series MPR Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	90
4	Rain Bird 1804-SAM-PRS VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	Adj
6	Rain Bird 1804-SAM-PRS VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	7	Adj
8	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	2	Adj
8	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	3	Adj
10	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	3	Adj
12	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	9	Adj
15	Rain Bird 1804-SAM-PRS HE-VAN Series Turf Spray 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	3	Adj
	Rain Bird R-VAN-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Hand Adjustable Rotary Stream, w/RD-1800 turf spray body, 4.0" Pop-Up. With Seal-A-Matic Check Valve and 45 psi in-stem pressure regulation.	3	CST
	Rain Bird R-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 4.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	13	360
	Rain Bird R-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 4.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	58	180
	Rain Bird R-1724 RD-1804-SAM-P45 Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 4.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	4	90
	Rain Bird R-VAN-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Hand Adjustable Rotary Stream, w/RD-1800 turf spray body, 6.0" Pop-Up. With Seal-A-Matic Check Valve and 45 psi in-stem pressure regulation.	2	CST
	Rain Bird R-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	3	360
	Rain Bird R-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	18	180
	Rain Bird R-1724 RD-1806-SAM-P45 (2) Turf Rotator, 17`-24` Rotary Stream, w/RD-1800 turf spray body on 6.0" pop-up, with check valve and 45 psi in-stem pressure regulator. 1/2" NPT Female Threaded Inlet.	8	90
	Rain Bird 1804-SAM-PRS With Hunter PCN-25 Bubbler Nozzles 4.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. 1/2" NPT Female Threaded Inlet. With Seal-A-Matic Check Valve. Pressure Regulating.	18	360

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	1" PVC Pipe Transition Point above grade Pipe transition point from PVC lateral to drip tubing with riser to above grade installation.	9
	3/4" Drip Tube	678.9 l.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PGA-PRS-D- Globe 1" 1", 1-1/2", 2" Electric Remote Control Valve, Globe. With Pressure Regulator Module.	4
	Rain Bird PESB (2) 1" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	10
	Rain Bird PESB (2) 1-1/2" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	2
	Rain Bird 33-DLRC 3/4" 3/4" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, Double Track Key Lug, and 2-Piece Body.	6
BF	Febco 825YA 1" Reduced Pressure Backflow Preventer	1
CC	Rain Bird ESP4-SMTE with (2) ESP-SM6 Moudules Outdoor Smart Modular Control System for Residential and Light Commercial Use. Wall Mount, Tipping Bucket Rain Sensor that Measures Rainfall.	1
RS	Rain Bird Rain Sensor With Rainfall and Temperature Data	1
P	MUNRO LP200B 2-HP Irrigation Pump	1
POC	Irrigation Water Point Of Connection (Existing Irrigation Manhole)	1
W	2" Domestic Water Supply Line (Tap Location For Domestic System)	1
	Irrigation Lateral Line: PVC Class 200 SDR 21 1" PVC Class 200 irrigation pipe.	2,240 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/4" PVC Class 200 irrigation pipe.	460 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/2" PVC Class 200 irrigation pipe.	300 l.f.
	Irrigation Lateral Line: PVC Schedule 40 PVC Class 200 irrigation pipe.	1500 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21 2" PVC Class 200 irrigation pipe.	1100 l.f.
	Irrigation Mainline: PVC Schedule 40 1 1/4"	100 l.f.
	Pipe Sleeve: PVC Schedule 80 4" or 2" Sch-40 Sleeving	440 l.f.

Valve Callout
Valve Number
Valve Flow
Valve Size

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION LEGEND

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: 04-10-2015 SHEET NO: **IR201**

PROJECT NO: 1443
2015-0002

Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date:	Designed By:
04-10-2015	B.G.V.
Drawing Number: 2015-0002	Checked By: J.J.S.

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IRRIGATION NOTES:

1. All work shall be per existing county or state code and is subject to inspection and approval by appropriate inspectors and/or owner representative. Installer to be responsible for all installation standards, practices and all permit requirements.

2. Julee Wolverton Landscapes have provided all base and planting information. Any discrepancies between said information and these irrigation plans shall be their responsibility. The installer will assume all costs and liabilities associated with any and all field changes to the system design.

3. The system is designed to operate from the source with a flow of 28-30 gallons per minute (GPM) at 55 pounds per square inch (PSI) at the pump. (Irrigation Water Supply

4. This is designed to opperate from a domestic water connection with the source providing a flow of 10-12 gallons per minute (GPM) at 75 pounds per square inch (PSI) with a 1" 825 RPYA Backflow Device.Unless otherwise noted on the plans, source flow and pressure are the responsibility of others.

5. All pipe to be sleeved wherever concrete, asphalt, or any hard surfaces are to be overlaid. All sleeves to be 2 times the diameter of the pipe to be sleeved. Main line sleeves to have an additional 4" inch sleeve in parallel for control wires.

6. Irrigation plan is a diagrammatic single line drawing. Any components shown on plan outside of landscape are shown for clarity only. Multiple pipes may be installed in the same trench when proper pipe spacing can be maintained.

7. Main line to be buried 24" (inch) to top of pipe.

8. Control wires to be routed with main line and attached at 24" increments with plastic wire ties or duct tape. Wire should be a looped common and one hot wire to each valve with extra wires in valve box. Wire splices to be located in a 10" (inch) round or larger valve box at least.

9. Swing pipe to be used on all sprinkler heads under 6 GPM and swing joints on all heads over 6 GPM. Maximum length of swing pipe to be 5' (foot).

10. Isolation valves to be located in 10" (inch) round valve box or larger.

11. For obstructions (Electrical Transformers, Trees, Fire Hydrants, etc...), that will interfere with proper coverage of sprinkler heads, will require the addition of properly patterned heads around obstruction as to provide head to head coverage to all irrigated areas.

12. Sprinkler heads to be set perpendicular to finished grade and adjusted to prevent over spray onto non irrigated areas.

13. Laterals are sized at transitions only, segments that are not noted will be the same size as adjacent segments. Up stream segments will never be smaller than any down stream segments on the same lateral.

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	PSI	PSI @ POC	GPM	PRECIP
	Domestic Water System						
1	Rain Bird XCZ-100-PRB-LC Control Zone Kit	1"	SHRUB AREA FOR DRIP EMITTERS		39.80	6.12	0.30 in/h
2	Rain Bird XCZ-100-PRB-LCControl Zone Kit	1"	TREE ZONE WITH PCN BUBBLERS		45.99	10.0	30.64 in/h
3	Rain Bird XCZ-100-PRB-LCControl Zone Kit	1"	SHRUB AREA FOR DRIP EMITTERS		38.94	10.0	0.30 in/h
4	Rain Bird XCZ-100-PRB-LCControl Zone Kit	1"	TREE ZONE WITH PCN BUBBLERS		44.81	9.00	30.64 in/h
	Irrigation Water System						
5	Rain Bird PESB (2)	1-1/2"	Turf Rotary	50.63	51.42	28.49	0.41 in/h
6	Rain Bird PESB (2)	1-1/2"	Turf Rotary	49.28	50.16	28.49	0.51 in/h
7	Rain Bird PESB (2)	1"	Turf Spray	32.59	50.81	12.97	1.85 in/h
8	Rain Bird PESB (2)	1"	Turf Spray	32.28	50.81	10.50	3.22 in/h
9	Rain Bird PESB (2)	1"	Turf Rotary	50.53	50.81	19.94	0.36 in/h
10	Rain Bird PESB (2)	1"	Turf Rotary	50.50	50.77	19.32	0.34 in/h
11	Rain Bird PESB (2)	1"	Turf Rotary	51.64	51.92	25.76	0.36 in/h
12	Rain Bird PESB (2)	1"	Turf Rotary	52.99	53.29	26.67	0.56 in/h
13	Rain Bird PESB (2)	1"	Turf Rotary	51.67	51.94	24.84	0.35 in/h
14	Rain Bird PESB (2)	1"	Turf Rotary	50.57	50.86	25.69	0.32 in/h
15	Rain Bird PESB (2)	1"	Turf Rotary	51.28	51.54	23.86	0.35 in/h
16	Rain Bird PESB (2)	1"	Turf Spray	35.95	51.54	19.77	2.29 in/h

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
	Domestic Water System						
1	Rain Bird XCZ-100-PRB-LC Control Zone Kit	SHRUB AREA FOR DRIP EMITTERS	0.30 in/h	1.40	280		
2	Rain Bird XCZ-100-PRB-LC Control Zone Kit	TREE ZONE WITH PCN BUBBLERS	30.64 in/h	1.40	3		
3	Rain Bird XCZ-100-PRB-LC Control Zone Kit	SHRUB AREA FOR DRIP EMITTERS	0.30 in/h	1.40	280		
4	Rain Bird XCZ-100-PRB-LC Control Zone Kit	TREE ZONE WITH PCN BUBBLERS	30.64 in/h	1.40	3		
	Irrigation Water System						
5	Rain Bird PESB	Turf Rotary	0.41 in/h	1.40	207	5,897	2,948
6	Rain Bird PESB	Turf Rotary	0.51 in/h	1.40	167	4,758	2,379
7	Rain Bird PESB	Turf Spray	1.85 in/h	1.40	46	596.7	198.9
8	Rain Bird PESB	Turf Spray	3.22 in/h	1.40	27	283.6	94.5
9	Rain Bird PESB	Turf Rotary	0.36 in/h	1.40	235	4,686	2,343
10	Rain Bird PESB	Turf Rotary	0.34 in/h	1.40	245	4,733	2,367
11	Rain Bird PESB	Turf Rotary	0.36 in/h	1.40	235	6,054	3,027
12	Rain Bird PESB	Turf Rotary	0.56 in/h	1.40	150	4,001	2,000
13	Rain Bird PESB	Turf Rotary	0.35 in/h	1.40	243	6,036	3,018
14	Rain Bird PESB	Turf Rotary	0.32 in/h	1.40	264	6,782	3,391
15	Rain Bird PESB	Turf Rotary	0.35 in/h	1.40	238	5,679	2,839
16	Rain Bird PESB	Turf Spray	2.29 in/h	1.40	37	731.6	243.9
TOTALS:			2,660	50,238	24,850		

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Design Date:	Designed By:
04-29-2015	B.G.V.
Drawing Number: 2015-0002	Checked By: J.J.S.

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION NOTES & DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: 04-29-2015 SHEET NO:

PROJECT NO: 1443 2015-0002

IR301

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Addendum 2

IRRIGATION NOTES:

1. All work shall be per existing county or state code and is subject to inspection and approval by appropriate inspectors and/or owner representative. Installer to be responsible for all installation standards, practices and all permit requirements.

2. **Julee Wolverton** has provided all base and planting information. Any discrepancies between said information and these irrigation plans shall be their responsibility. The installer will assume all costs and liabilities associated with any and all field changes to the system design.

3. The system is designed to operate from the irrigation water source with a flow of **28-30** gallons per minute (GPM) at **55** pounds per square inch (PSI) at the pump. (Irrigation Water Supply)

4. This is designed to opperate from a domestic water connection with the source providing a flow of **10-12** gallons per minute (GPM) at **75** pounds per square inch (PSI) with a 1" 825 RPYA Backflow Device.Unless otherwise noted on the plans, source flow and pressure are the responsibility of others.

5. All pipe to be sleeved wherever concrete, asphalt, or any hard surfaces are to be overlaid. All sleeves to be 2 times the diameter of the pipe to be sleeved. Main line sleeves to have an additional 4" inch sleeve in parallel for control wires.

6. Irrigation plan is a diagrammatic single line drawing. Any components shown on plan outside of landscape are shown for clarity only. Multiple pipes may be installed in the same trench when proper pipe spacing can be maintained.

7. Main line to be buried 24" (inch) to top of pipe.

8. Control wires to be 2-Wire Control Path In A 1" PVC "Electrical" Conduit With A Tracer Wire. 2 Wire Control Path To Be Hunter Or Rain Bird

9. Swing pipe to be used on all sprinkler heads under 6 GPM and swing joints on all heads over 6 GPM. Maximum length of swing pipe to be 5' (foot).

10. Isolation valves to be located in 10" (inch) round valve box or larger.

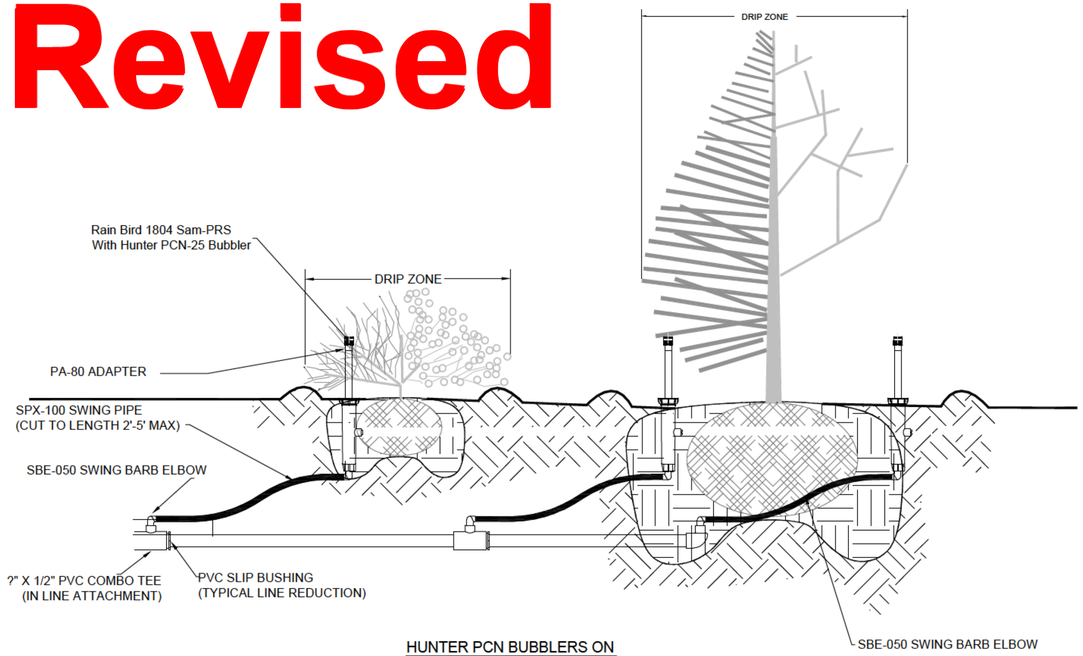
11. For obstructions (Electrical Transformers, Trees, Fire Hydrants, etc...), that will interfere with proper coverage of sprinkler heads, will require the addition of properly patterned heads around obstruction as to provide head to head coverage to all irrigated areas.

12. Sprinkler heads to be set perpendicular to finished grade and adjusted to prevent over spray onto non irrigated areas.

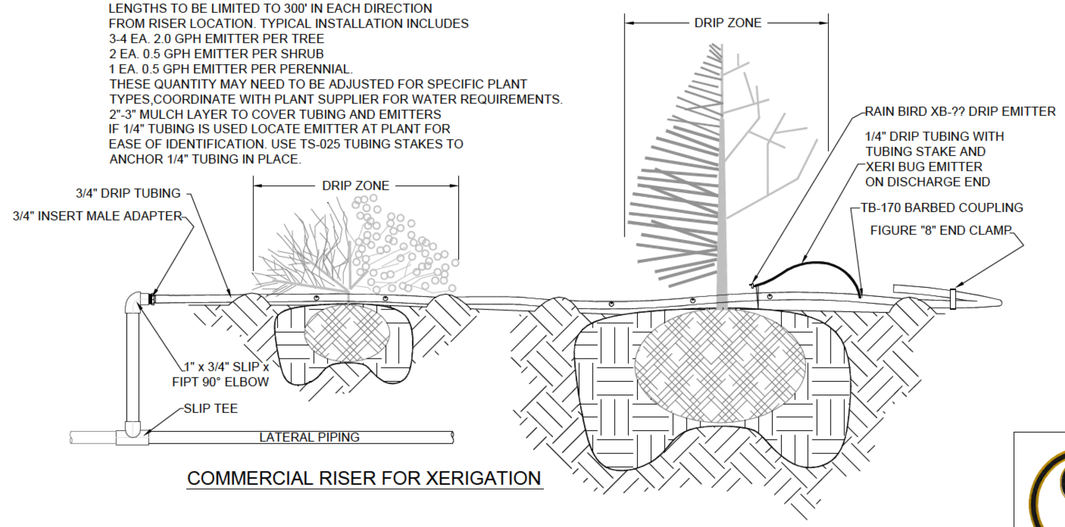
13. Laterals are sized at transitions only, segments that are not noted will be the same size as adjacent segments. Up stream segments will never be smaller than any down stream segments on the same lateral.

14. Valve boxes located in beds shall be tan /brown in color. Valve boxes in turf areas shall be green in color

Revised



HUNTER PCN BUBBLERS ON
Rain Bird 1804-SAM-PRS 4" POP-UP BODY
WITH CHECK VALVE AND PRESSURE
REGULATING STEM
NTS



COMMERCIAL RISER FOR XERIGATION

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1443
2015-0002

IR301

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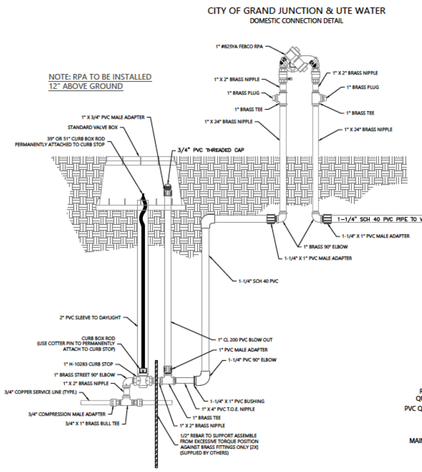
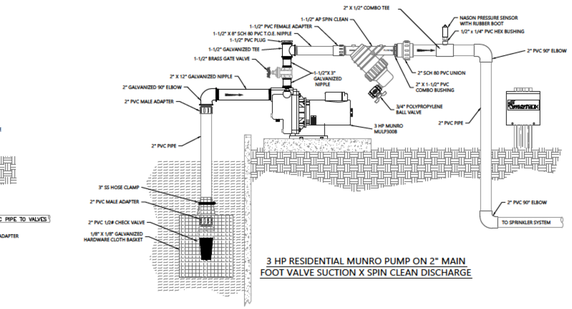
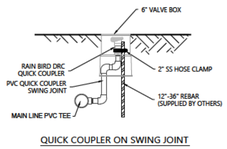
Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date:	Designed By:
04-10-2015	B.G.V.
Drawing Number: 2015-0002	Checked By: J.J.S.

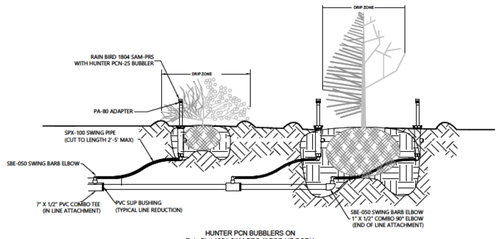




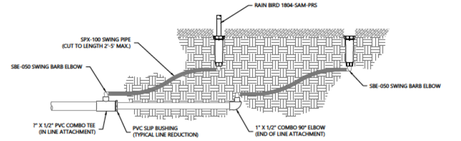
3 HP RESIDENTIAL MUNRO PUMP ON 2" MAIN
FOOT VALVE SUCTION X SPIN CLEAN DISCHARGE



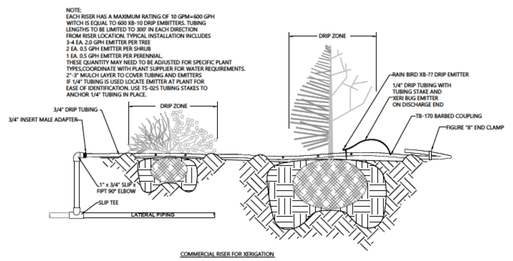
QUICK COUPLER ON SWING JOINT



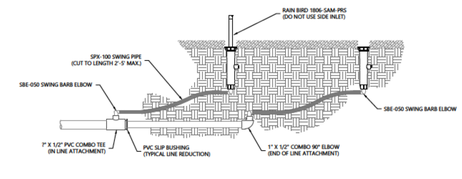
HUNTER PCN BUBBLERS ON
Rain Bird 1804-SAM-PRS 4" POP-UP BODY
WITH CHECK VALVE AND PRESSURE
REGULATING STEM
NTS



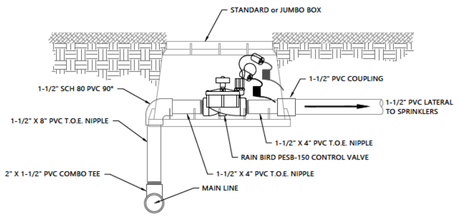
RAIN BIRD 1804-SAM-PRS ON SWING PIPE



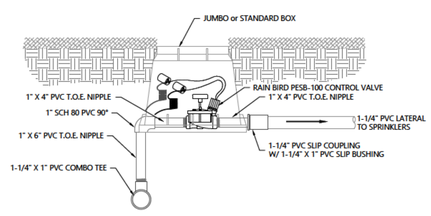
COMMERCIAL RISER FOR XERIGATION



RAIN BIRD 1806-SAM-PRS ON SWING PIPE



RAIN BIRD PESB-150 ON 2" MAIN
WITH 1-1/2" PVC TO LATERALS



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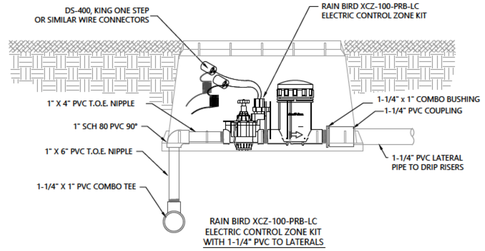
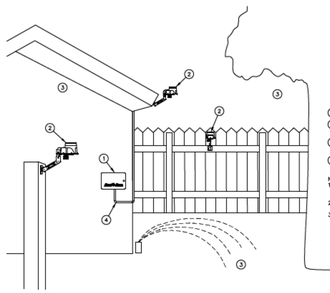
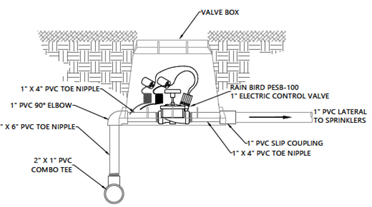
WITH 1-1/4" PVC TO LATERALS







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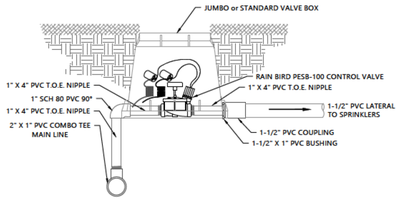
WITH 1" PVC TO LATERALS



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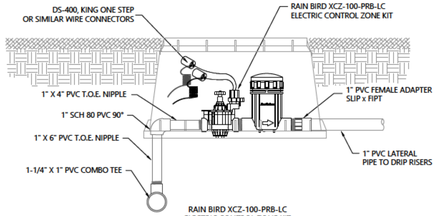
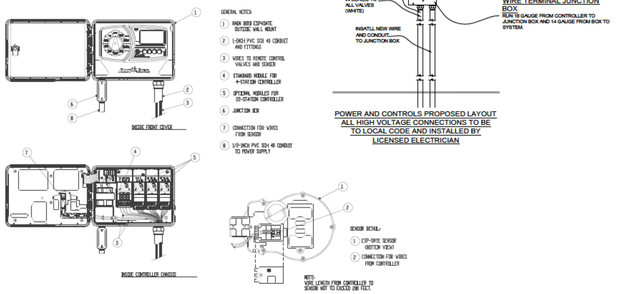
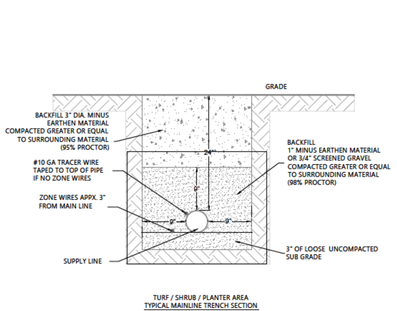
W/ 1-1/2" PVC TO LATERALS



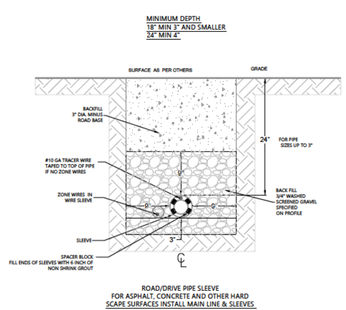


WIRE TERMINAL JUNCTION BOX
REFER TO GAUGE FROM CONTROLLER TO JUNCTION BOX AND 14 GAUGE FROM BOX TO SYSTEM.

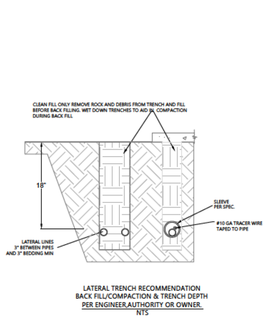
POWER AND CONTROLS PROPOSED LAYOUT
ALL HIGH VOLTAGE CONNECTIONS TO BE TO LOCAL CODE AND INSTALLED BY LICENSED ELECTRICIAN



TURF / SHRUB / PLANTER AREA
TYPICAL MAINLINE TRENCH SECTION
NTS



ROAD/DRIVE PIPE SLEEVE
FOR ASPHALT, CONCRETE AND OTHER HARD SCAPE SURFACES INSTALL MAIN LINE & SLEEVES
NTS



LATERAL TRENCH RECOMMENDATION
BACK FILL/COMPACTION & TRENCH DEPTH
PER ENGINEER,AUTHORITY OR OWNER.
NTS

JOHN J. STEUBLE CERTIFIED IRRIGATION DESIGNER /005105 COMMERCIAL

Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date:	Designed By:
04-29-2015	B.G.V.
Drawing Number: 2015-0002	Checked By: J.J.S.

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T 605.355.6804

www.chamberlinarchitects.com

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: 04-29-2015 SHEET NO: IR302

PROJECT NO: 1443
2015-0002

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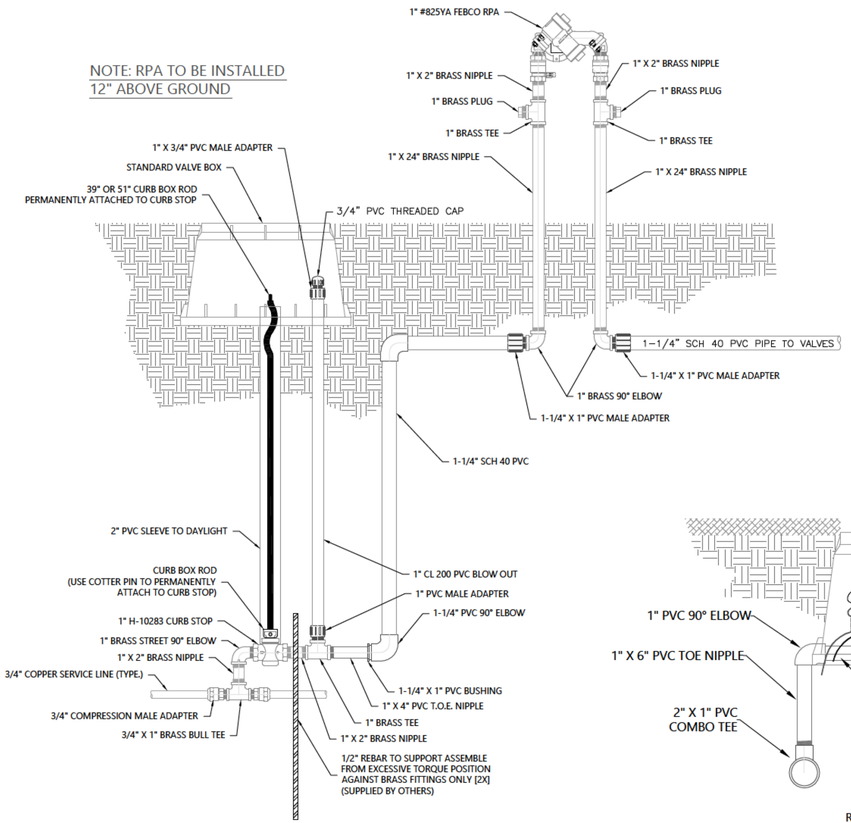
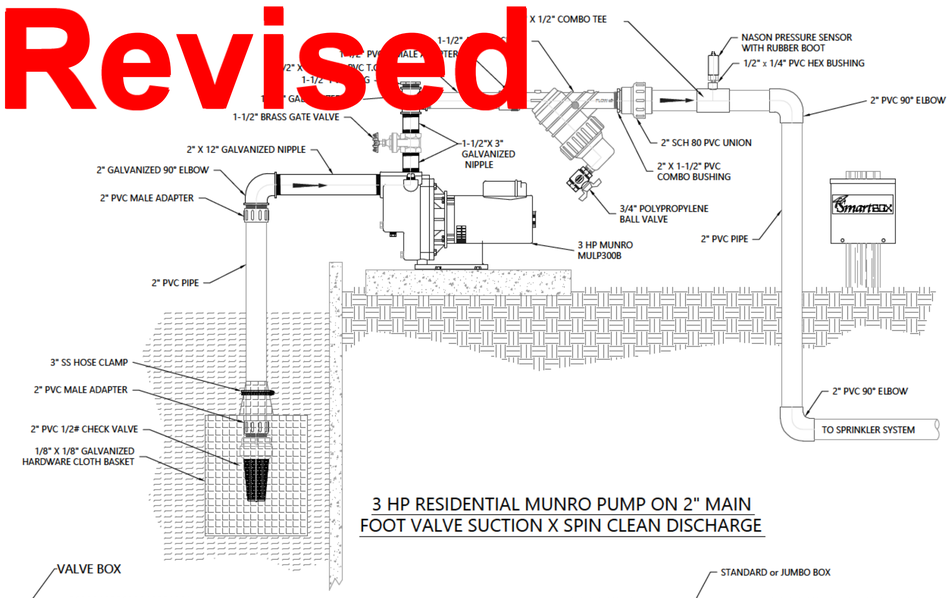
Addendum 2

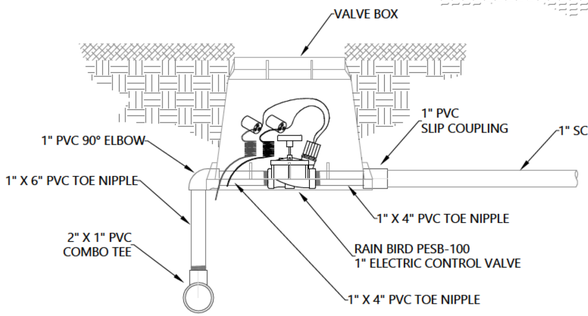
CITY OF GRAND JUNCTION & UTE WATER
DOMESTIC CONNECTION DETAIL

Revised

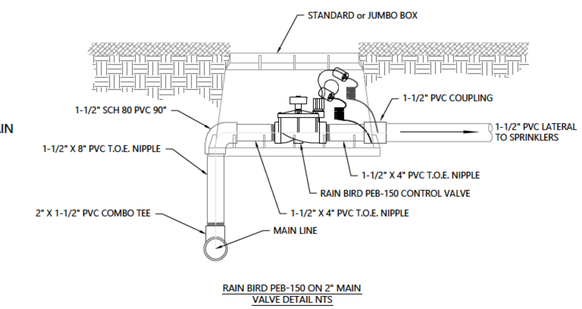




3 HP RESIDENTIAL MUNRO PUMP ON 2" MAIN
FOOT VALVE SUCTION X SPIN CLEAN DISCHARGE



RAIN BIRD PEB-100 ON 2" MAIN
VALVE DETAIL NTS



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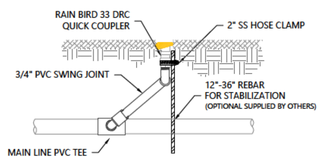
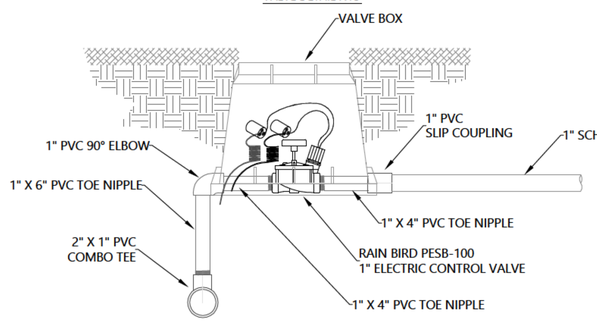
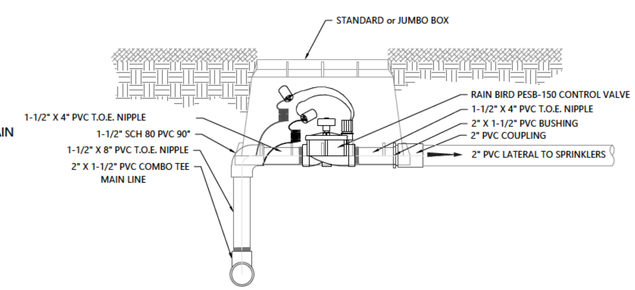
VALVE DETAIL NTS



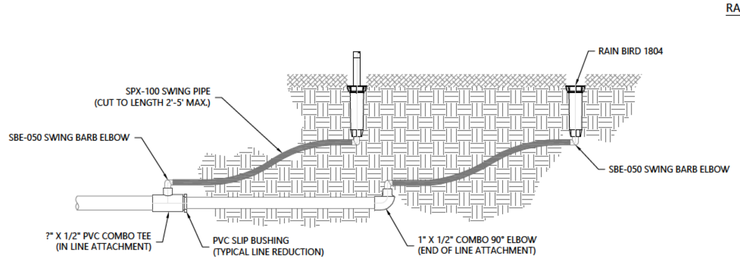
33 DRC QUICK COUPLER ON SWING JOINT



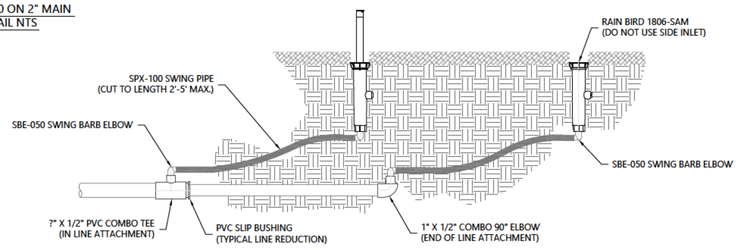
RAIN BIRD PEB-100 ON 2" MAIN
VALVE DETAIL NTS



RAIN BIRD PESB-150 SCRUBBER ON 2" MAIN



RAIN BIRD 1804 ON SWING PIPE



RAIN BIRD 1806-SAM ON SWING PIPE

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

IRRIGATION DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
100% CD's

DRAWN BY: B.G.V. CHECKED BY: J.J.S.

DATE: **04-10-2015** SHEET NO: **IR302**

PROJECT NO: **1443** 2015-0002

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Grand Junction Pipe & Supply
Irrigation Design Department
2868 I-70 Bus. Loop
Grand Jct, CO 81501
(970) 243-4604

Design Date:	Designed By:
04-10-2015	B.G.V.
Drawing Number:	Checked By:
2015-0002	J.J.S.

4/10/2015 11:56:15 AM

ARCHITECTURAL ABBREVIATIONS

ABV	above
ACC	accessories
AFF	above finished floor
ALT	alternate
AL	aluminum
APC	acoustical panel ceiling
ARCH	architect (ural)
ASPH	asphalt
A/C	air conditioning
BCS	baby changing station
BD	board
BLDG	building
BLKG	blocking
BO	bottom of
BRG	bearing
CBU	cemetitious backer unit
CG	corner guard
CJ	control joint
CLG	ceiling
CLR	clear (ance)
CMU	concrete masonry unit
CNRG	corner guard
COL	column
CONC	concrete
CONT	continuous or continue
CORR	corridor
CPT	carpet (ed)
CSMT	casement
CT	ceramic tile
CTR	center
CU	condensing unit
CWOG	center wall on grid
DBL	double
DEMO	demolish / demolition
DF	drinking fountain
DIM	dimension (s)
DIR	direction
DISP	dispenser
DN	down
DR	door
DS	downspout
DTL	detail
DWG	drawing
DWR	drawer
E	east
EA	each
EC	evaporative cooler
EF	exhuast fan
EG	etched glass/glazing
EIFS	exterior insul finish sys
EJ	expansion joint
EL	elevation
ELEC	electric (al)
EM	emergency
EWC	electric water cooler
EWG	end wall corner guard
EQ	equal
EXG	existing
EXH	exhaust
EXP	exposed
EXT	exterior
FBO	furnished by owner
FD	floor drain
FDN	foundation
FE	fire extinguisher
FEC	fire extinguisher cabinet
FEP	finished end panel
FFE	finished floor elevation
FIN	finish
FLG	flashing
FLR	floor (ing)
FLUR	fluorescent
FO	face of
FRMG	framing
FRP	fiber reinforced plastic
FT	foot (feet)
FTG	footing
FV	field verify
GA	gage, gauge
GAL	gallon
GALV	galvanized
GB	grab bar
GC	general contractor
GL	glass, glazing
GWB	gypsum wallboard
GYP	gypsum
HAS	headed anchor stud
HB	hose bibb
HCP	handicap (ed)
HDR	header
HDW	hardware
HM	hollow metal
HOR	horizontal
HP	heat pump
HR	hose reel
HSS	hollow structural steel
HT	height
HVAC	heating /vent /air cond
HWD	hardwood
INCL	include (d) (ing)
INSUL	insulate (d) (ing)
INT	interior
INV	invert
JST	joist
JT	joint
L	length, angle
LAM	laminate (d)
LAV	lavatory
LB	pound
LF	lineal foot
LG	laminated glass, glazing
LIN	linoleum
LR	louver
LT	light
MA	match
MAS	masonry
MATL	material
MAX	maximum
MB	marker board
MECH	mechanic (al)
MFR	manufacture (r) (d)
MH	manhole
MIN	minimum
MISC	miscellaneous
MLD	molding, moulding
MMB	membrane
MO	masonry opening
MT	mount (ed) (ing)
MTL	metal
N	north
N/A	not applicable
NIC	not in contract
NOM	nominal
NTS	not to scale
NECY	necessary
OC	on center (s)
OD	outside diameter
OFD	overflow drain
OH	overhead
OPG	opening
OPH	opposite hand
OPP	opposite
OSB	oriented strand board
OTS	open to structure
PB	particle board
PERF	perforate
PERIM	perimeter
PLAM	plastic laminate
PLT	plate
PNL	panel
PNT	paint (ed)
PR	pair
PROJ	projector, projection
PSF	pounds per square foot
PSI	pounds per square inch
PT	pressure treated
PTD	paper towel dispenser
PTN	partition
PVC	polyvinyl cholride
PVMT	pavement
PWD	plywood
QT	quarry tile
R	riser, radius
RB	rubber base
REC	recycling
RCMD	recommend (ed) (ations)
RE	reference
REF	refrigerator
REIN	reinforce (d) (ing)
REQ	required
REV	revision (s), revised
RD	roof drain
RFG	roofing
RH	robe hook
RM	room
RO	rough opening
ROW	right of way
RR	restroom
RTU	roof top unit
RUB	rubber
S	south
SAG	susp acoustic grid
SC	shower curtain rod & hooks
SCH	schedule
SD	soap dispenser
SHT	sheet
SHTG	sheathing
SIM	similar
SND	sanitary napkin dispenser
SNV	sanitary napkin vendor
SPEC	specification
SPKR	speaker
SQ	square
SS	solid surface
SST	stainless steel
STD	standard
STL	steel
STOR	storage
STR	structural
SUSP	suspended
T	tread
TB	towel bar
TEL	telephone
T.O.	top of
TOC	top of concrete
TOS	top of steel
TOW	top of wall
TPD	toilet paper dispenser
TS	tube steel
TYP	typical
T&G	tongue and groove
UNO	unless noted otherwise
VB	vapor barrier
VCT	vinyl composition tile
VERT	vertical
VIF	verify in field
VM	vending machine
VNL	vinyl sheet
VTR	vent through roof
W	west, wide, width
W/	with
WB	wood base
WC	watercloset
WD	wood
WDW	window
WF	wide flange
WG	wire glass
W/O	without
WP	waterproof (ing)
WR	waste receptacle
WRB	weather resistive barrier
WWM	welded wire mesh

SYMBOLS

REVISION

TOP OF WALL 100' 0" — ELEVATION

A — COLUMN GRID LOCATION

101A — DOOR NUMBER

AL / HM — WINDOW TYPE

CENTER LINE

LINE OF WALL ABOVE OR HIDDEN LINE

BREAK LINE

MATCH LINE

Room 101 — ROOM NAME / ROOM NUMBER

1 / 4 A101 2 / 3 — INTERIOR WALL ELEVATION REFERENCE DRAWING

TYP 1 A101 — REFERENCED SECTION NUMBER SHEET NUMBER

1 — BASIC WALL TYPE

1 / 2 SBXD — WALL TYPE AND PROPERTIES, SEE "WALL DESIGNATION KEY" BELOW

TYP 1 A101 — REFERENCED DETAIL NUMBER SHEET NUMBER

ANGLE

DIAMETER

PERPENDICULAR

PLATE

PLUS OR MINUS

FLOOR DRAIN

FIRE EXTINGUISHER

GENERAL NOTES

1. COMPLY WITH ALL MANUFACTURERS RECOMMENDATIONS AND INDUSTRY STANDARDS RELEVANT TO THE WORK HEREIN.
2. ALL DIMENSIONS ARE FROM FACE OF FINISH UNO.
3. ALL ALIGNMENTS ARE FACE OF FINISH UNO.
4. FIELD VERIFY ALL DIMENSIONS AND ROUGH OPENINGS PRIOR TO FABRICATION AND/OR INSTALLATION.
5. PROVIDE 1/2-HR RATED WALLS SEPARATING SLEEPING UNITS (PER GA FILE NO. WP 3514).

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

OWNER
ARCHITECT
CONTRACTOR
FIELD
OTHER

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

ARCHITECT'S SUPPLEMENTAL INSTRUCTION NO: Four (4)

ARCHITECT: Chamberlin Architects
437 Main Street
Grand Junction, CO 81501

ARCHITECTS PROJECT NO: 1443

DATE OF ISSUANCE: July 29, 2015

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding in accordance with these instructions indicates your acknowledgement that there will be no change in the Contract Sum or Contract Time.

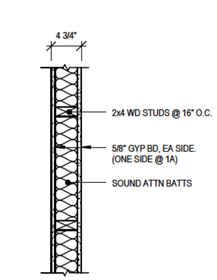
1. Sheet A001, Wall Types, Wall Types 1, 1A & 10, Change test to read: "30-MIN FIRE RATING – UL U407, APPLIES TO WALLS WITH HEAVY DASHED LINE AS INDICATED ON SHEET A002, LIFE SAFETY PLAN".
2. Sheet A001, Wall Types, Wall Types 5 & 5A, Delete "2-HR FIRE RATING – UL U906".

Attachments: None

ARCHITECT: Chamberlin Architects, P.C.

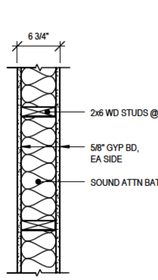
BY: Jonathan West

S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\ASI\ASI004.1443.doc

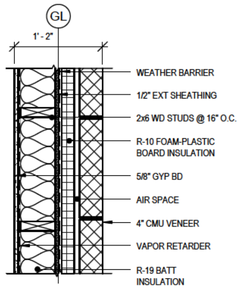


WALL TYPE 1 & 1A

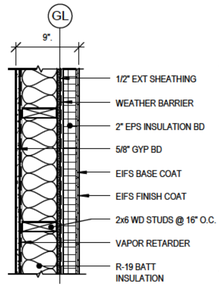
30MIN FIRE RATING-UL U407



WALL TYPE 2



WALL TYPE 3



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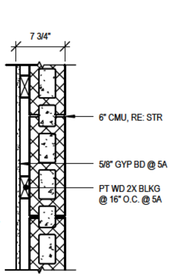
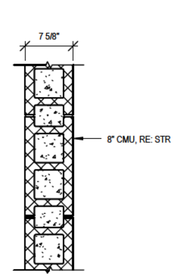
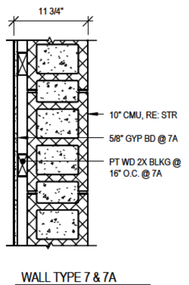


WALL TYPE 5 & 5A

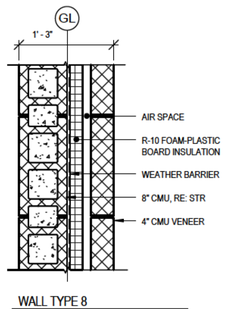
2HR FIRE RATING - UL U906



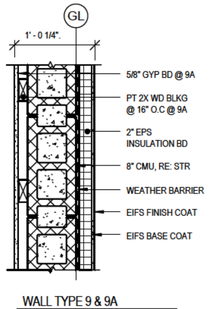
WALL TYPE 6



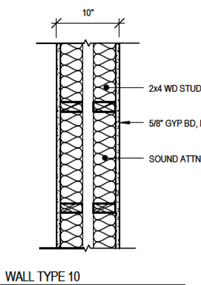
WALL TYPE 7 & 7A



WALL TYPE 8

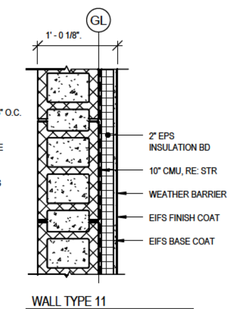


WALL TYPE 9 & 9A



WALL TYPE 10

30MIN FIRE RATING-UL U407



WALL TYPE 11

NOTES:
1. ALL EXTERIOR WALL TYPES ARE SHOWN WITH THE EXTERIOR WALL FACING RIGHT UNLESS OTHERWISE NOTED.
2. PROVIDE GLASS MAT WATER-RESISTANT BACKER BOARD IN LIEU OF GYPSUM WALL BOARD BEHIND ALL WALL TILE.
3. GYPSUM BOARD SHALL BE MOISTURE-RESISTANT AT THE FOLLOWING LOCATIONS: WALLS AND CEILINGS OF ALL RESTROOMS AND SHOWERS
4. WALL TYPE CHANGES OCCUR AT CORNERS OR INTERSECTIONS OF WALLS UNLESS NOTED OTHERWISE.
5. ALL INTERIOR WALLS TO BE TYPE 1 UNLESS NOTED OTHERWISE.

1 / A001 WALL TYPES

0" 6" 1'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

NOTES, SYMBOLS, ABBREVIATIONS AND WALL TYPES

NO: ISSUED FOR: DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A001

PROJECT NO: 1443

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C:\REVIT PROJECTS\1443_CENTRAL.rvt 4/10/2015 11:56:15 AM

PROPOSAL REQUEST

Date: 2015 11:56:

FIELD
OWNER
ARCHITECT
CONTRACTOR

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

TO: PCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

PROPOSAL REQUEST NO: Sixteen (16)

DATE: September 28, 2015

ARCHITECT'S PROJECT NO: 1443

CONTRACT DATED: December 18, 2014

Please submit an itemized quotation for changes in the Contract Sum and/or Time incident to proposed modifications to the Contract Documents described herein.

THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

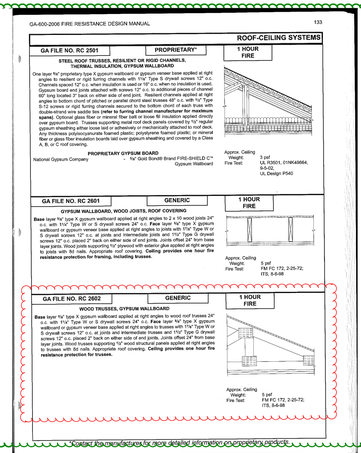
Description:

1. Drawing A002, Life Safety Plan: At Sleeping 116, 119, 120, 122, 123 & 124 step 5/8" drywall (on walls) at bottom chord of wood trusses. Provide (2) layers of 5/8" drywall on the bottom chord of wood trusses, match GA FILE NO. RC 2602 (see attached).
2. Drawing A101 Floor Plan: Between Sleeping 120 and Laundry 121 (on Sleeping 120's side), provide rated wall assembly matching GA FILE NO. WP 3640 (see attached).
3. Drawing E201 Lighting Plan: At Sleeping 120, move LWI from east wall to north wall.

Attachments: GA FILE NO. RC 2602; GA FILE NO. WP 3640

ARCHITECT: Chamberlin Architects, P.C.
BY: Jonathan West, AIA

R:\1443 - Orchard Mesa Fire Station #4\4. CONSTRUCTION\PROPOSAL REQUESTS\PR#16\1443.docx


GA-600-2006 FIRE RESISTANCE DESIGN MANUAL 133

ROOF-CEILING SYSTEMS

GA FILE NO. RC 2501 — PROPRIETARY® — 1 HOUR FIRE

STEEL ROOF TRUSSES, RESILIENT OR RIGID CHANNELS, THERMAL INSULATION, GYPSUM WALLBOARD

One layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied at right angles to resilient or rigid furring channels with Y-in.* Type S drywall screws 12" o.c. Channels spaced 12" o.c. when insulation is used or 16" o.c. when no insulation is used. Channels placed perpendicular to supporting steel joists. Use 2" channels for joists spaced 60" long located 2" back on either side of end joint. Resilient channels applied at right angles to bottom chord of pitched or parallel chord steel trusses 48" o.c. with ¼" Type S-12 screws or rigid furring channels secured to the bottom chord of steel trusses with double-strand wire saddle ties (refer to furring channel manufacturer for attachment details). Insulation, when used, is supported by wire ties and is placed directly over gypsum board. Trusses supporting metal roof deck panels covered by ½" regular gypsum sheathing either loose laid or adhesively or mechanically attached to roof deck. Any thickness polyisocyanurate foamed plastic; polystyrene foamed plastic; or mineral fiber or glass fiber insulation boards laid over gypsum sheathing and covered by a Class A, B, or C roof covering.

PROPRIETARY GYPSUM BOARD
National Gypsum Company — • ¼" Gold Bond® Brand FIRE-SHIELD C™ Gypsum Wallboard

Approx. Ceiling Weight: 3 psf
Fire Test: UL R2501, 0190406664, 9-5-02, UL Design P540

GA FILE NO. RC 2601 — GENERIC — 1 HOUR FIRE

GYPSUM WALLBOARD, WOOD JOISTS, ROOF COVERING

Base layer ½" type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1¼" Type W or S drywall screws 24" o.c. Face layer ½" type X gypsum wallboard applied at right angles to joists with 1¼" Type W or S drywall screws 12" o.c. at joints and intermediate joints and 1½" Type S drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood joists supporting ½" plywood with exterior glue applied at right angles to joists with 8d nails. Appropriate roof covering. **Ceiling provides one hour fire resistance protection for framing, including trusses.**

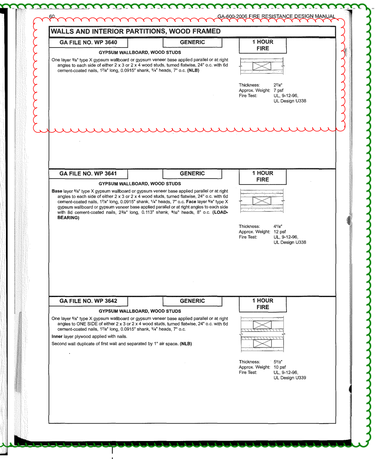
Approx. Ceiling Weight: 5 psf
Fire Test: FM FC 172, 2-25-72; ITS, 8-6-99

GA FILE NO. RC 2602 — GENERIC — 1 HOUR FIRE

WOOD TRUSSES, GYPSUM WALLBOARD

Base layer ½" type X gypsum wallboard applied at right angles to wood roof trusses 24" o.c. with 1¼" Type W or S drywall screws 24" o.c. Face layer ½" type X gypsum wallboard applied at right angles to trusses with 1¼" Type W or S drywall screws 12" o.c. at joints and intermediate trusses and 1½" Type S drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood trusses supporting ½" wood structural panels applied at right angles to trusses with 8d nails. Appropriate roof covering. **Ceiling provides one hour fire resistance protection for trusses.**

Approx. Ceiling Weight: 5 psf
Fire Test: FM FC 172, 2-25-72; ITS, 8-6-99


GA-600-2006 FIRE RESISTANCE DESIGN MANUAL 135

WALLS AND INTERIOR PARTITIONS, WOOD FRAMED

GA FILE NO. WP 3640 — GENERIC — 1 HOUR FIRE

GYPSUM WALLBOARD, WOOD STUDS

One layer ½" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of either 2 x 3 or 2 x 4 wood studs, spaced 24" o.c. with 6d cement-coated nails, 1¾" long, 0.0915" shank, ¼" heads, 7" o.c. **(NLB)**

Thickness: 3¼"
Approx. Weight: 7 psf
Fire Test: UL, 9-13-96, UL Design U336

GA FILE NO. WP 3641 — GENERIC — 1 HOUR FIRE

GYPSUM WALLBOARD, WOOD STUDS

Base layer ½" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of either 2 x 3 or 2 x 4 wood studs, turned flatwise, 24" o.c. with 6d cement-coated nails, 1¾" long, 0.0915" shank, ¼" heads, 7" o.c. Face layer ½" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side with 8d cement-coated nails, 2¼" long, 0.113" shank, ¼" heads, 8" o.c. **(LOAD-BEARING)**

Thickness: 4¾"
Approx. Weight: 12 psf
Fire Test: UL, 9-13-96, UL Design U338

GA FILE NO. WP 3642 — GENERIC — 1 HOUR FIRE

GYPSUM WALLBOARD, WOOD STUDS

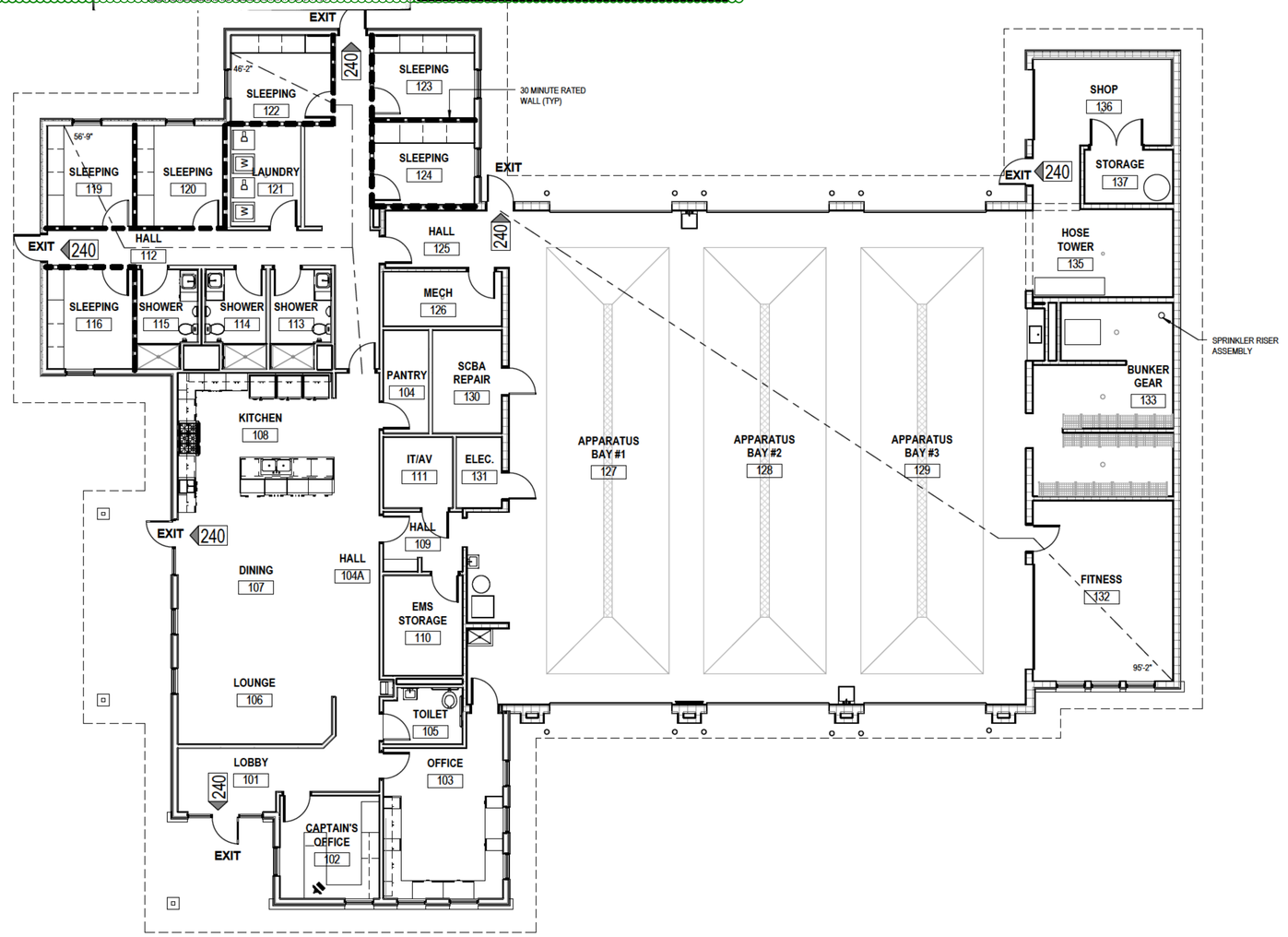
One layer ½" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to ONE SIDE of either 2 x 3 or 2 x 4 wood studs, turned flatwise, 24" o.c. with 6d cement-coated nails, 1¾" long, 0.0915" shank, ¼" heads, 7" o.c.

Inner layer plywood applied with nails.

Second wall duplicate of first wall and separated by 1" air space. **(NLB)**

Thickness: 5¼"
Approx. Weight: 10 psf
Fire Test: UL, 9-13-96, UL Design U339

Contact fire rated systems for more detailed information and complete description



1 A002 LIFE SAFETY PLAN

0' 4' 8'

XXX INDICATES MAXIMUM EGRESS CAPACITY

CODE CHECKLIST

CODE IN USE:

2012 INTERNATIONAL BUILDING CODE (IBC)
2012 INTERNATIONAL MECHANICAL CODE (IMC)
2012 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2012 INTERNATIONAL PLUMBING CODE (IPC)
2012 INTERNATIONAL FUEL GAS CODE (IFGC)
2014 NATIONAL ELECTRICAL CODE (NEC)

TYPE OF OCCUPANCY: GROUP B, R-2 & S-1

SECTION 420, R-2; 420.2 SEPARATION WALLS. IN ACCORDANCE W/ SECTION 708.3 FIRE PARTITIONS. EXCEPTION 2: 1/2 HR.

PER 508.3: NON-SEPARATED OCCUPANIES: OCCUPANCIES B, R-2 & S-1 WILL NOT BE REQUIRED TO BE SEPARATED AS THE MOST RESTRICTIVE ALLOWABLE BUILDING AREA IS BEING USED. EXCEPTION 2: DWELLING UNITS SHALL BE SEPARATED.

TYPE OF CONSTRUCTION: TYPE V-B

TOTAL NUMBER OF STORIES: 1

EXTERIOR FIRE WALL RATING: 0-HR (per TABLE 601)

SITE SET BACKS:

FRONT YARD: 30'+ TO ASSUMED PROPERTY LINE
SIDE YARD: 30'+ TO ASSUMED PROPERTY LINE
REAR YARD: 30'+ TO ASSUMED PROPERTY LINE

BASIC ALLOWABLE FLOOR AREA: 7,000 SQ FT FOR TYPE V-B GROUP R-2
FRONTAGE INCREASE: 5,250 SQ FT ([XX/XX - 0.25] 30/30)
SPRINKLER INCREASE: 21,000 SQ FT (7,000 * 3 = 21,000)

TOTAL ALLOWABLE FLOOR AREA: 33,250 SQ FT (7,000 + 5,250 + 21,000 = 33,250)

ACTUAL BUILDING AREA: 8,900 SQ FT

BASIC ALLOWABLE BUILDING HEIGHT: 40 FEET
SPRINKLER INCREASE: 20 FEET (per SECTION 504.2)

TOTAL ALLOWABLE BUILDING HEIGHT: 60 FEET (40 + 20 = 60)

ACTUAL BUIDING HEIGHT: 44 FEET

COMMON PATH OF TRAVEL:
B & S-1 OCCUPANCY: 100 FEET ALLOWED W/ SPRINKLER SYSTEM (per TABLE 1014.3)
R-2 OCCUPANCY: 125 FEET ALLOWED W/ SPRINKLER SYSTEM (per TABLE 1014.3)

EXIT ACCESS TRAVEL DISTANCE:
B OCCUPANCY: 300 FEET ALLOWED W/ SPRINKLER SYSTEM (per TABLE 1016.2)
R-2 & S-1 OCCUPANCY: 250 FEET ALLOWED W/ SPRINKLER SYSTEM (per TABLE 1016.2)

MINIMUM CORRIDOR WIDTH: 44 INCHES (per TABLE 1018.2)

DEAD END CORRIDOR DISTANCE: 50 FEET ALLOWED W/ SPRINKLER SYSTEM (per SECTION 1018.4, EXCEPTION 2)

OCCUPANT LOAD: 94 (per TABLE 1004.1.2 - 9,400 / 100 = 94)

MINIMUM NO. of REQUIRED EXITS: 2

EXITS PROVIDED: 6

EGRESS WIDTH:
MINIMUM REQUIRED: 94 * 0.2 = 18.8 inches
PROVIDED: 252 inches (36 * 7 = 252)

CORRIDOR WALL RATING: 0 (per TABLE 1018.1)

MIN. NO. of REQ'D PLUMBING FIXTURES:

		MIN REQ'D	PROVIDED
MALE WC	47 OCCUPANTS @ 1 PER 25 =	2	2
FEMALE WC	47 OCCUPANTS @ 1 PER 25 =	2	2
MALE LAV	47 OCCUPANTS @ 1 PER 40 =	2	2
FEMALE LAV	47 OCCUPANTS @ 1 PER 40 =	2	2
DRINKING FOUNTAIN	94 OCCUPANTS @ 1 PER 100 =	1	1
SERVICE SINK		1	5

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Rapid City, South Dakota 57701
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

CODE CHECKLIST & LIFE SAFETY PLAN

NO: ISSUED FOR: DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **A002**

C:\REVIT PROJECTS\1443-CENTRAL-PARK.rvt

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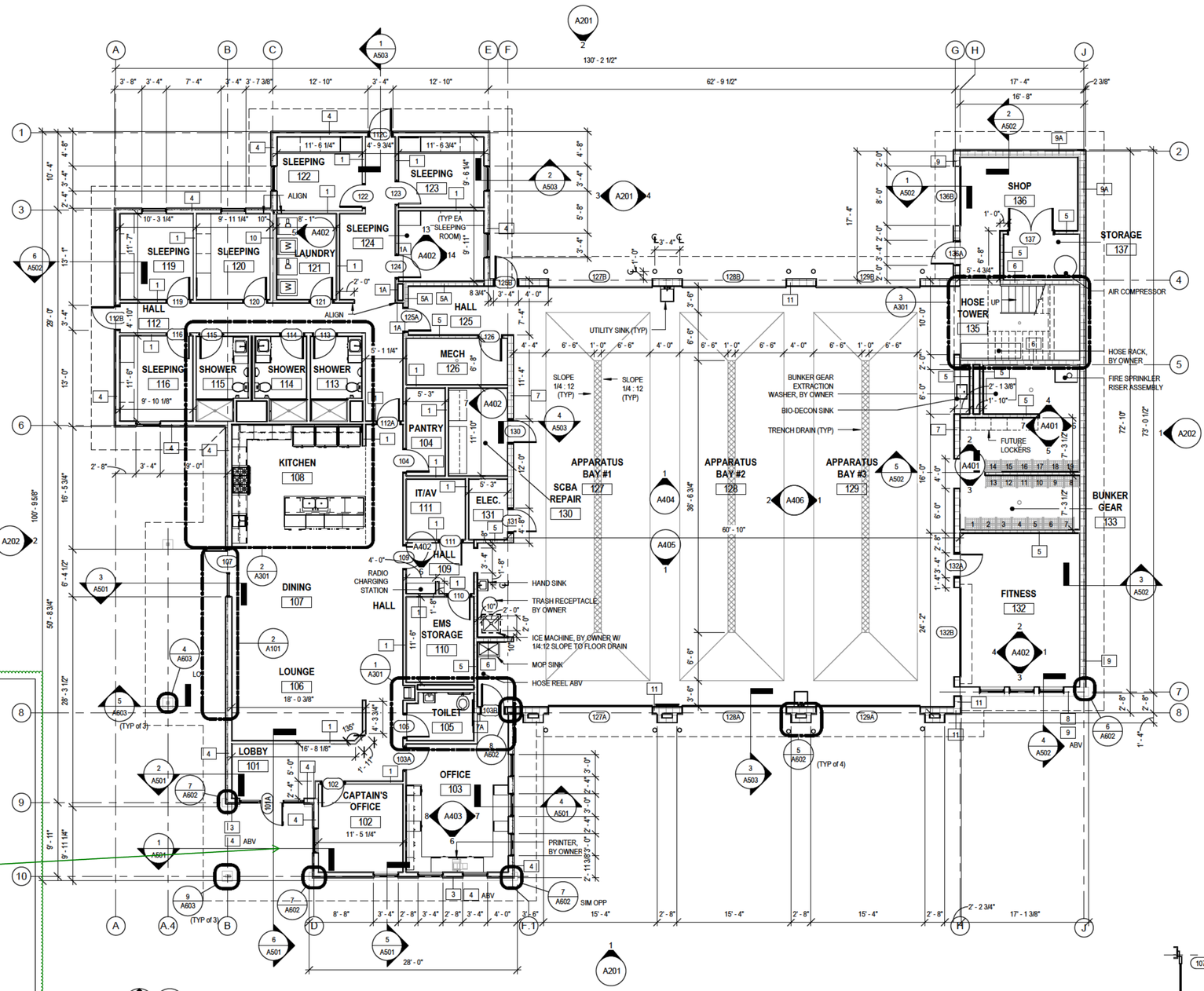
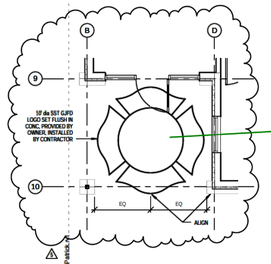
GENERAL NEW CONSTRUCTION NOTES

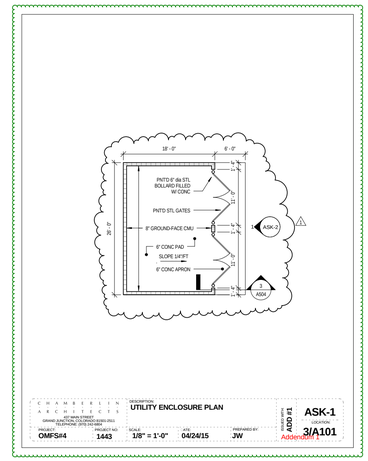
1. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT PRIOR TO CONTINUING CONSTRUCTION.
2. ITEMS NOT NOTED ON THE DRAWINGS SHALL BE CONSIDERED THE SAME AS NOTED ITEMS WHICH ARE GRAPHICALLY REPRESENTED IN THE SAME MANNER.
3. PROVIDE TREATED SOLID WOOD BLOCKING FOR ALL WALL EQUIPMENT, TOILET ACCESSORIES, MILLWORK AND OTHER WALL MOUNTED ITEMS.
4. CONTRACTOR SHALL CAULK AT THE INTERFACE OF INTERIOR FACES OF DOOR FRAMES WITH ADJACENT MATERIALS THOUGH JOINT MAY NOT BE VISIBLE.
5. PROVIDE TRANSITION STRIPS BETWEEN FLOOR MATERIALS OF DISSIMILAR HEIGHTS. CENTER TRANSITION STRIPS UNDER DOORS OR OTHER PLACES OUT OF SIGHT.
6. PROVIDE POSITIVE SLOPE ON ALL FLOOR DRAINS MINIMUM OF1/8" : 12". SLOPE FLOOR ALL AROUND FROM ADJACENT WALLS TO FLOOR DRAINS, DO NOT DEPRESS ONLY THE AREA IMMEDIATELY AROUND THE DRAIN.
7. REFER TO THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR THE LOCATIONS OF PIPING, VENTS, DUCTS, CURBS, FANS AND OTHER ITEMS WHICH PENETRATE THE ROOF PLANE.
8. DOOR JAMB LOCATION OFF FACE OF WALL IS 4", TYPICAL, UNLESS NOTED OTHERWISE.

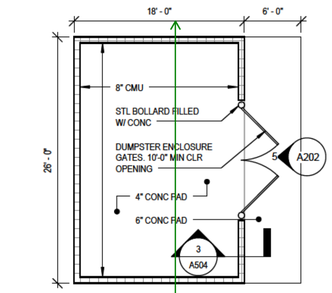


1 FLOOR PLAN
A101
0' 4' 8'

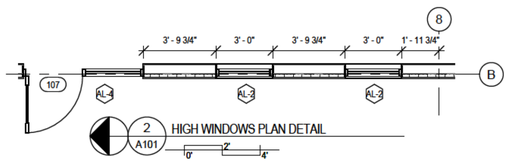


CHAMBERLIN ARCHITECTS	DESCRIPTION: ENLARGED PLAN - GJFD LOGO				ASK-6
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 1/4" = 1'-0"	DATE: 7/20/15	PREPARED BY: JW	LOCATION: A101





3 DUMPSTER ENCLOSURE FLOOR PLAN
A101



2 HIGH WINDOWS PLAN DETAIL
A101
0' 2' 4'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FLOOR PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A101

PROJECT NO: 1443

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4/10/2015 11:56:42 AM

LEGEND

GYP BD, PAINT	6" X 4' RECESSED LINEAR FLUORESCENT WALL WASH, RE: ELEC	PENDANT, RE: ELEC	SUPPLY AIR GRILLE, RE: MECH	NOTE: CENTER LIGHT FIXTURES IN SPACE AS SHOWN ON REFLECTED CEILING PLANS WHEN LIGHT FIXTURES ARE NOT DIMENSIONED. (TYP)	
2X4 ACOUSTICAL PANEL CEILING. BALANCE TILE AND GRID AT EDGES IN ROOMS, UNO.	SUSPENDED LINEAR STRIP LIGHT, RE: ELEC	DOWNLIGHT, RE: ELEC	EXHAUST FAN, RE: MECH		
2X2 ACOUSTICAL PANEL CEILING. BALANCE TILE AND GRID AT EDGES IN ROOMS, UNO.	UNDERCABINET LIGHT RE: ELEC	WALL SCONCE, RE: ELEC	RETURN AIR GRILLE, RE: MECH	P	CEILING MOUNTED PROJECTOR
	2'X4' RECESSED LIGHT, RE: ELEC	2'X2' RECESSED LIGHT, RE: ELEC	EXIT SIGN, RE: ELEC	S	CEILING MOUNTED SPEAKER

RFI #: 041 — **Date Created: 10/13/2015**

Answer Company	Answered By	Author Company	Authored By
City of Grand Junction 250 North 5th Street Grand Junction, CO 81501	Lee Cooper	FCI Constructors, Inc. - GJ P. O. Box 1767 Grand Junction, CO 81502	Adam Shuler

Co-Respondent	Author RFI Number

Subject	Discipline	Category
10-7-15 IT Walk	Special Systems/Electrical	Information

Cc: Company Name	Contact Name	Copies	Notes
FCI Constructors, Inc. - GJ	Craig Reid	1	
Canyon Electric	Steve Bergman	1	
Hunter Drywall	Kevin Hunter	1	
Grand Mesa Mechanical, Inc.	Greg Martin	1	

Question — **Date Required: 10/20/2015**

Just to confirm from our IT walk yesterday and call this morning. We need to proceed with
1) make the IT room ceiling a hard lid vs. a grid ceiling
2) confirm we can still use the AC unit with some possible modifications for mounting in the IT room
3) mount the light fixture in the IT room on the East wall vs. ceiling
4) move the domestic water lines to the south side of the IT room with the isolation valves by the door
5) proceed with the added electrical work for the lounge TV
6) add a 4" and 1" conduit for IT to cross the entry hall hard lid where the cable tray won't work.

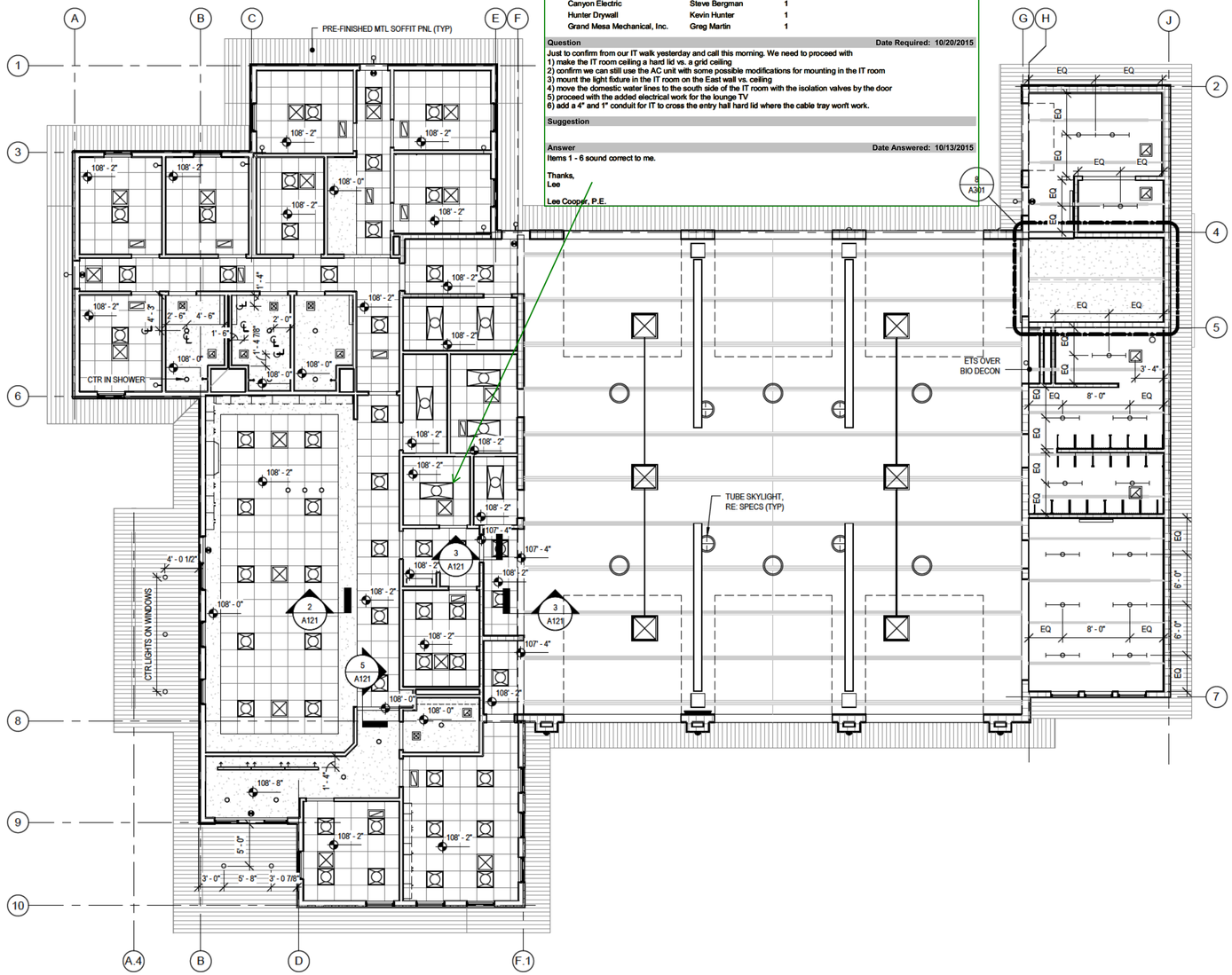
Suggestion

Answer — **Date Answered: 10/13/2015**

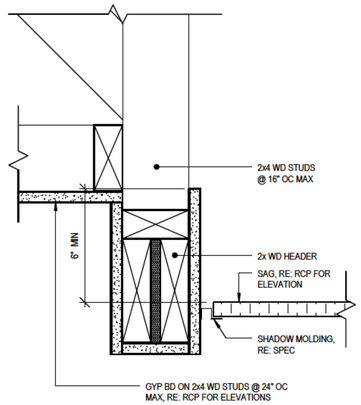
Items 1 - 6 sound correct to me.

Thanks,
Lee

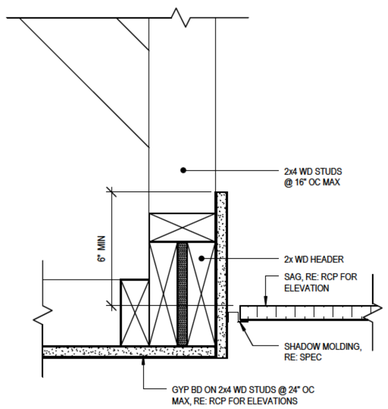
Lee Cooper, P.E.



1 A121 REFLECTED CEILING PLAN

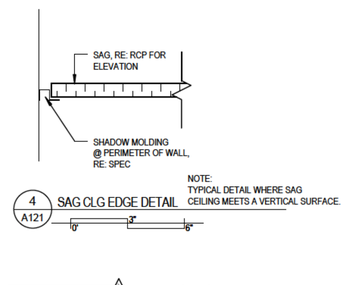


5 A121 GYP BOARD DROP SOFFIT AT SAG CLG



2 A121 GYP BOARD SOFFIT AT SAG CLG

3 A121 SAG CLG @ CMU SOFFIT



4 A121 SAG CLG EDGE DETAIL

NOTE:
TYPICAL DETAIL WHERE SAG CEILING MEETS A VERTICAL SURFACE.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

REFLECTED CEILING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A121

PROJECT NO: 1443

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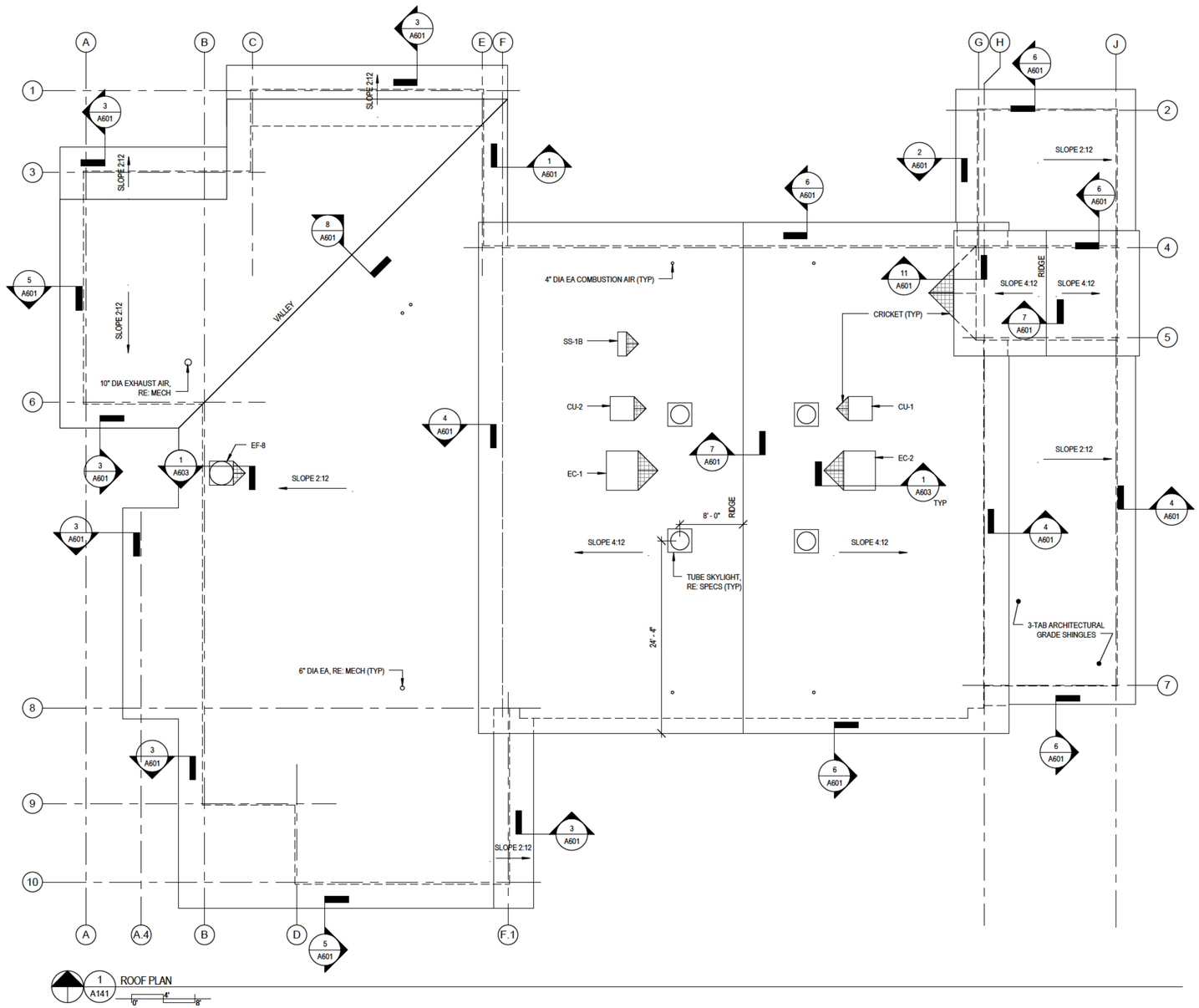

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

ROOF PLAN

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PROJECT NO: 1443

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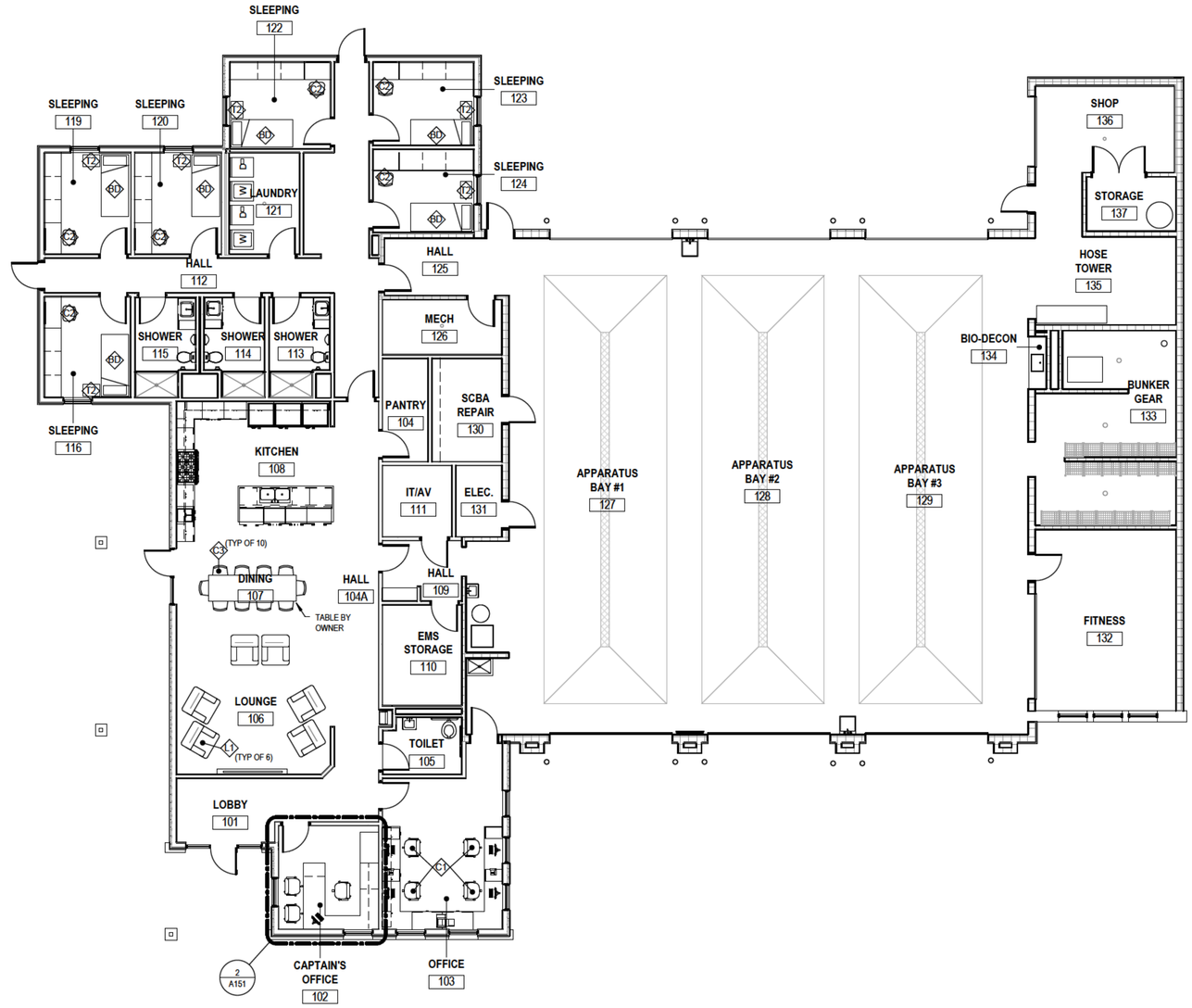
FURNITURE SCHEDULE					
ITEM	TAG	MANUFACTURER	MODEL NUMBER	DESCRIPTION	COLORS
1	BD			BED	
3	C1			OFFICE TASK CHAIR	
4	C2			OFFICE DESK CHAIR	
5	C3			DINING CHAIR	
6	D1			DESK SYSTEM	
7	L1			RECLINER	
9	T2			NIGHT STAND	

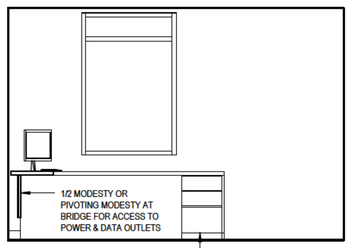
NOTE: FFE SHOWN FOR COORDINATION ONLY. ALL FFE BY OTHERS.

NOTE: LOCATE 2 GROMMETS IN THE FIELD WITH THE OWNER FOR WIRE MANAGEMENT. PROVIDE WIRE MANAGEMENT TRAYS UNDER THE WORKSURFACE FROM THE GROMMET TO THE ELECTRIC AND DATA WALL OUTLETS FOR WIRE MANAGEMENT.

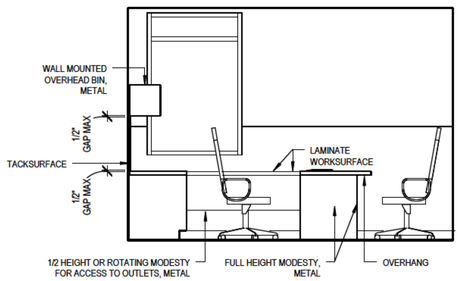
2 A151 ENLARGED DESK D1



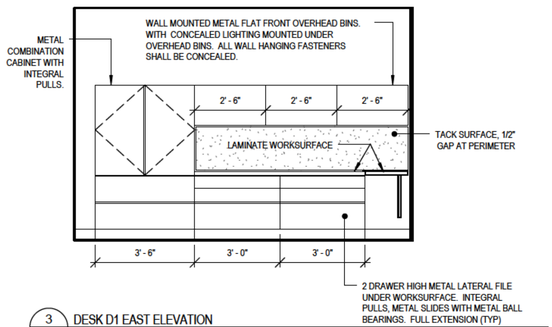
1 A151 FURNITURE PLAN



5 A151 DESK D1 WEST ELEVATION



4 A151 DESK D1 SOUTH ELEVATION



3 A151 DESK D1 EAST ELEVATION

FFE LEGEND

- NEW FURNITURE
- NEW FURNITURE TAG, RE: FURNITURE PRODUCT BINDER OR FURNITURE SCHEDULE FOR SPECIFICATIONS
- Room 101 — ROOM NAME, ROOM NUMBER
- 1 / 4 A101 2 / 3 — INTERIOR WALL ELEVATION REFERENCE DRAWING

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FURNITURE, FIXTURES, AND EQUIPMENT

FOR REFERENCE ONLY

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PROJECT STATUS: 100% CDs

DRAWN BY: css CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A151

PROJECT NO: 1443

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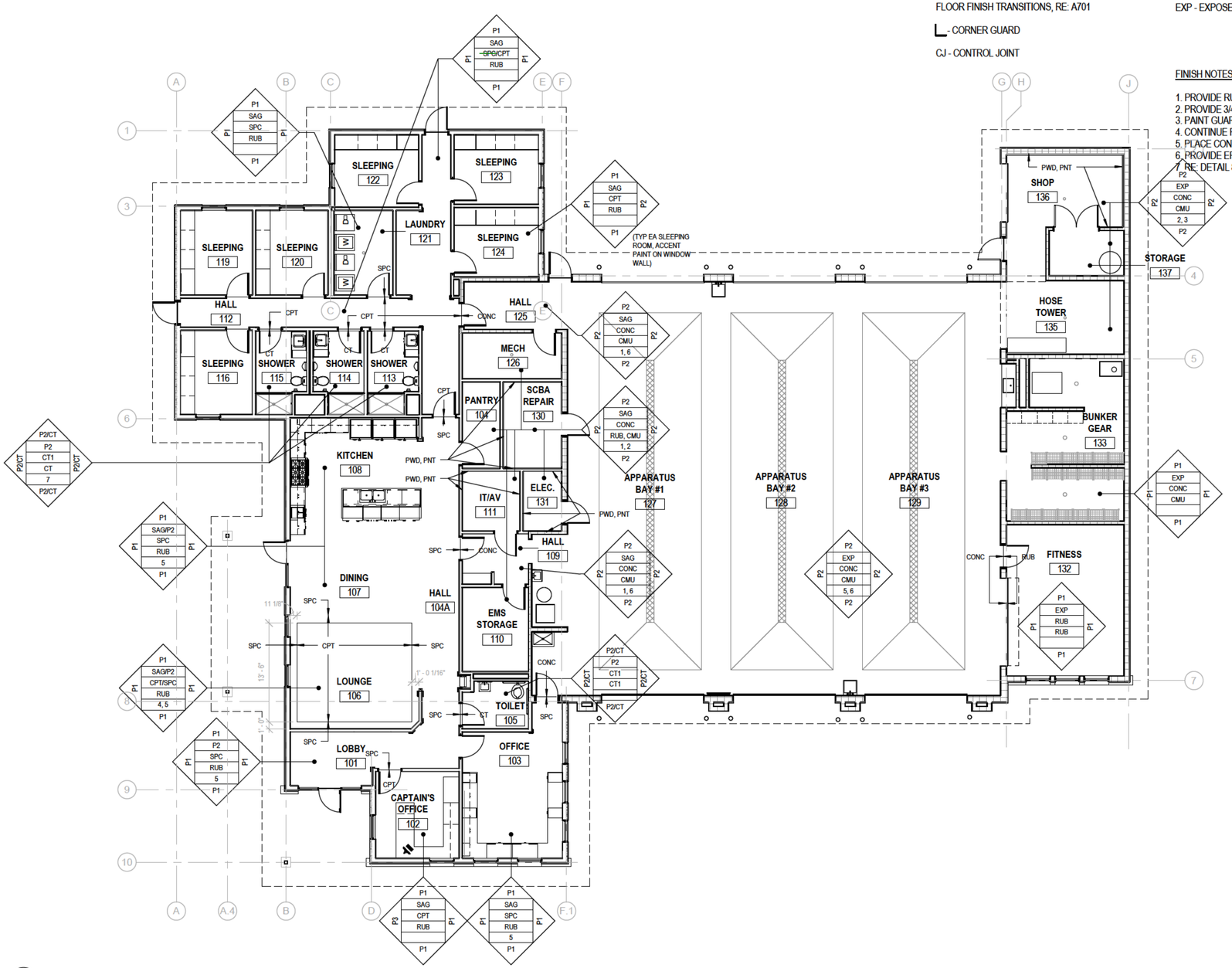

1 A161 FINISH PLAN

0' 4' 8'

P1 / SAG / CPT1 / WD / 1,2 / P1 / DN

- WALL FINISH (NORTH, SOUTH, EAST, WEST)
- CEILING FINISH
- FLOOR FINISH
- BASE FINISH
- FINISH NOTES

NOTES:

COLORS, RE: INTERIOR COLOR SCHEDULE A741

PATTERN AT WALLS, RE: INTERIOR ELEVATIONS A401-A406

PATTERN AT CEILINGS, RE: REFLECTED CEILING PLAN A121

FLOOR FINISH TRANSITIONS, RE: A701

- CORNER GUARD

CJ - CONTROL JOINT

WALL FINISHES

P# - CMU OR GYPSUM WALLBOARD W/ PAINT

CMU - SEALED CONCRETE MASONRY UNIT

CT# - CERAMIC TILE

CEILNG FINISH

SAG - SUSPENDED ACOUSTICAL PANEL CEILING.

P# - GYPSUM WALLBOARD WITH PAINT.

EXP - EXPOSED TO STRUCTURE.

FLOOR FINISHES

SPC - STAINED & POLISHED CONCRETE

CONC - SEALED CONCRETE

CT# - CERAMIC TILE.

CPT - CARPET TILE.

RUB - RUBBER, RESILIENT ATHLETIC FLOORING. FURNISHED AND INSTALLED BY OWNER.

BASE FINISHES

CT# - CERAMIC TILE.

RUB - RUBBER BASE.

CMU - CONCRETE MASONRY UNIT.

FINISH NOTES

1. PROVIDE RUB BASE AT GWB.
2. PROVIDE 3/4" PLYWOOD ON INDICATED WALLS FOR MOUNTING EQUIPMENT, PNT P2.
3. PAINT GUARDRAIL AND HANDRAIL P4.
4. CONTINUE POLISHED CONCRETE UNDER CPT IN LIVING AREA (TYP).
5. PLACE CONTROL JOINTS IN CONC ALONG GRIDLINES, UNO.
6. PROVIDE EPOXY PAINT TO 8' - 0" AFF.
7. RE: DETAIL 8/A402 FOR TYPICAL TILE WAINSCOT PATTERN.

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GRAND JUNCTION, COLORADO

INTERIOR FINISH PLAN

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DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A161

PROJECT NO: 1443

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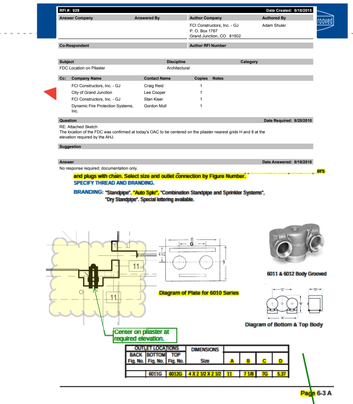

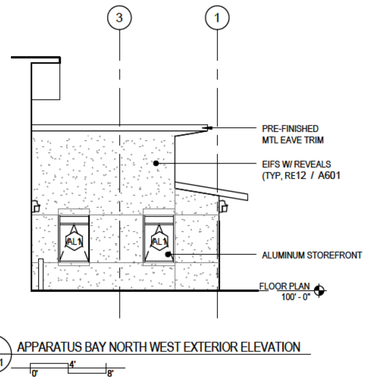

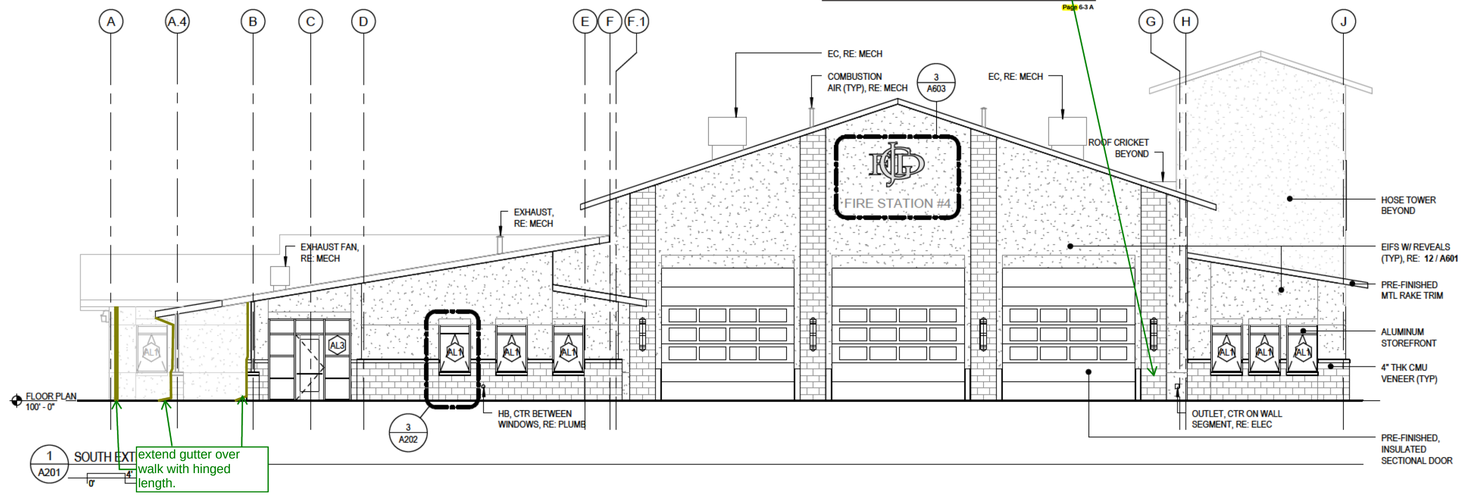

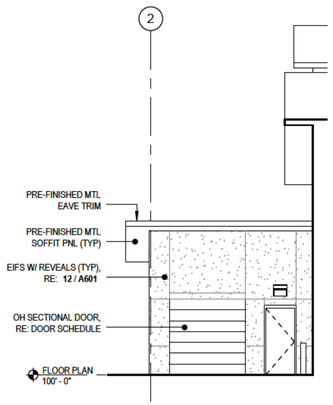

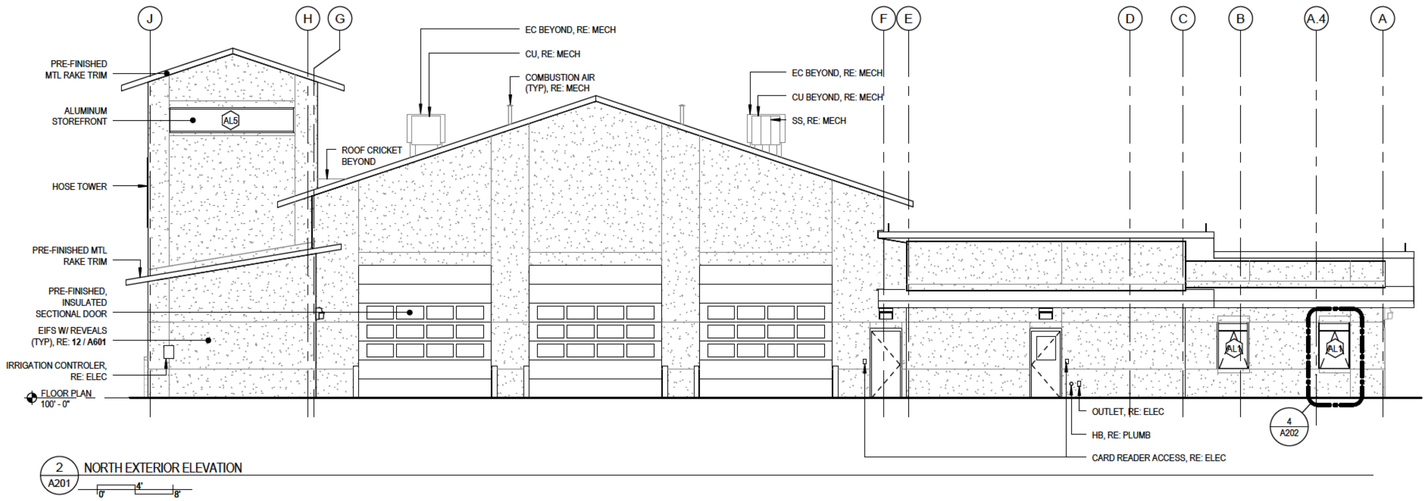

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

EXTERIOR ELEVATIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Aaron CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 A201

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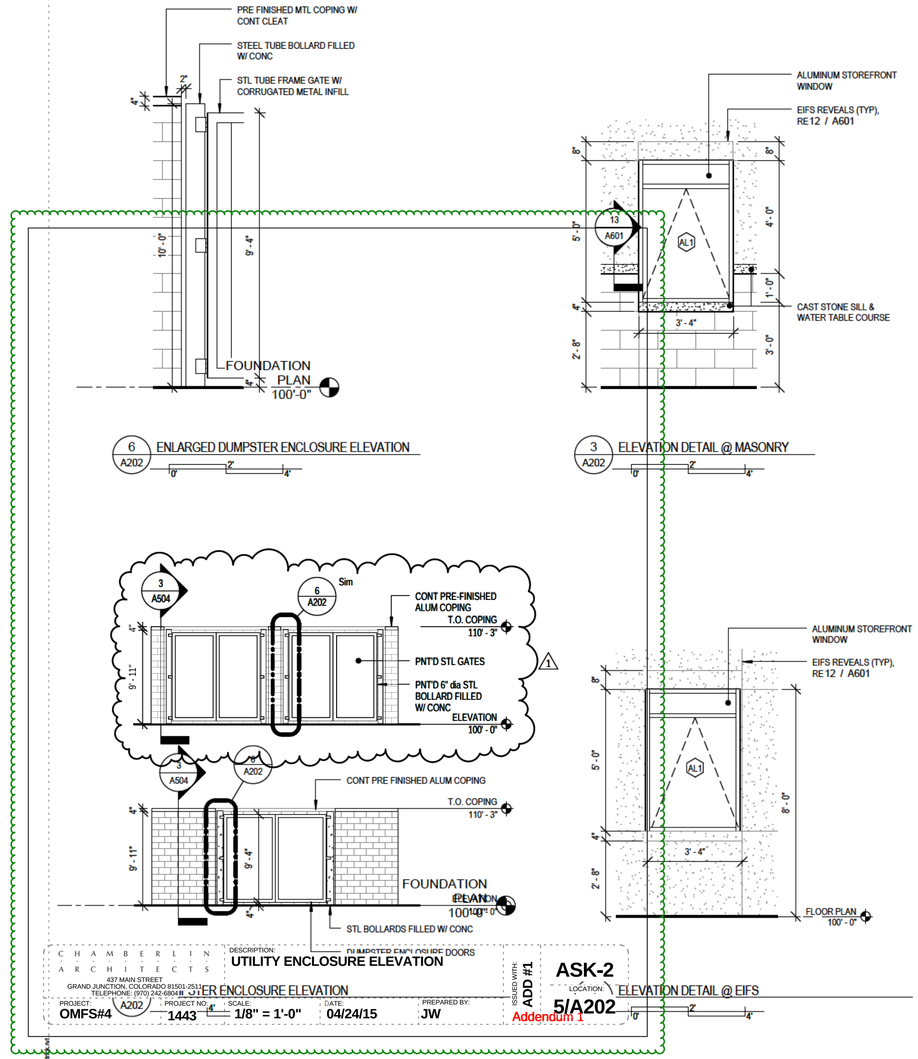
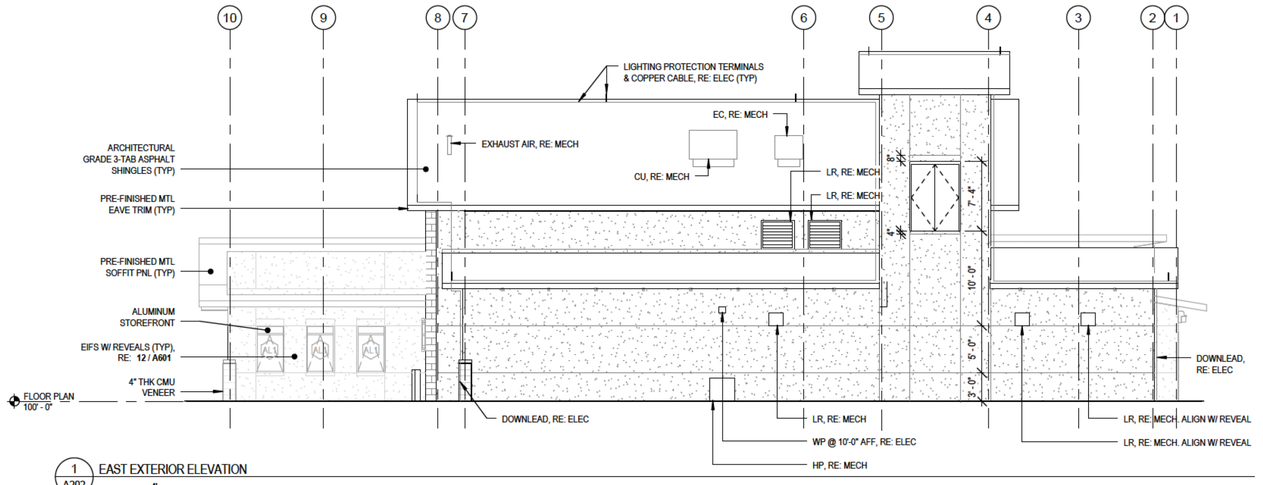


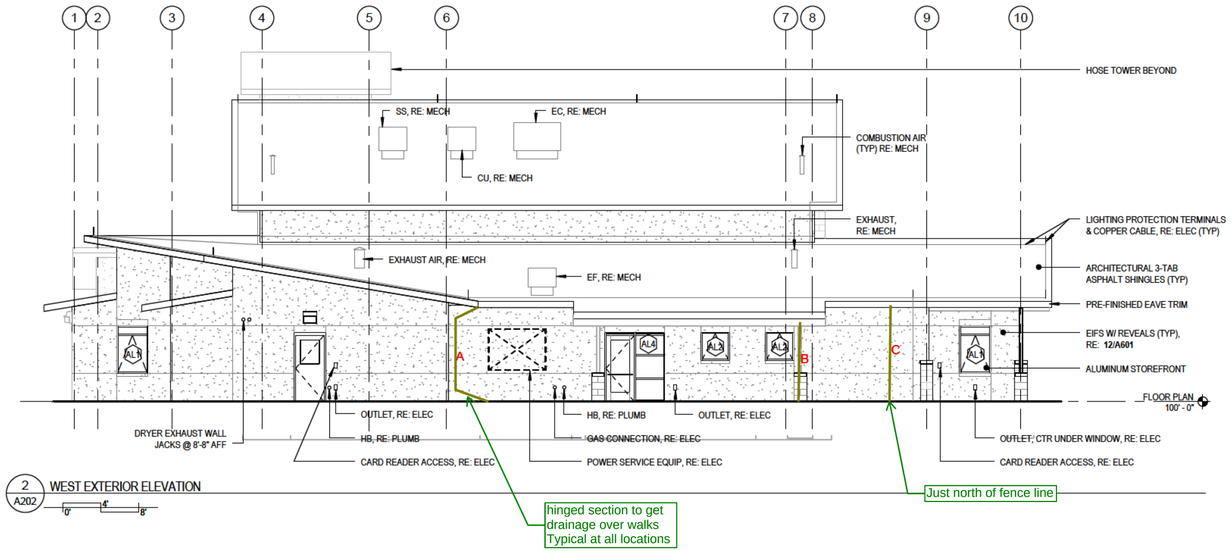
6 A202 ENLARGED DUMPSTER ENCLOSURE ELEVATION

3 A202 ELEVATION DETAIL @ MASONRY

3 A202 ELEVATION DETAIL @ EIFS



1 A202 EAST EXTERIOR ELEVATION



2 A202 WEST EXTERIOR ELEVATION

CHAMBERLIN ARCHITECTS 437 MAIN STREET GRAND JUNCTION, COLORADO 81501-2517 TELEPHONE: (970) 242-6804	DESCRIPTION: UTILITY ENCLOSURE ELEVATION				ISSUED WITH: ADD #1	ASK-2	
						LOCATION: 5/A202	
PROJECT: OMFS#4	A202	PROJECT NO: 1443	SCALE: 1/8" = 1'-0"	DATE: 04/24/15	PREPARED BY: JW	Addendum 1	

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GRAND JUNCTION, COLORADO

EXTERIOR ELEVATIONS

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DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **A202**

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4/10/2015 11:59:04 AM

Subject	Discipline	Category
Door 135 Installation	Architectural	Owner Request and/or Owner Furnishing

Cc:	Company Name	Contact Name	Copies	Notes
	FCI Constructors, Inc. - GJ	Craig Reid	1	
	FCI Constructors, Inc. - GJ	Stan Kiser	1	
	City of Grand Junction	Lee Cooper	1	

Question — Date Required: 9/1/2015

Per OAC discussions Door 135 is to be installed to swing into the stairwell. It is to be centered on the wall it is installed in and the frame should be installed so the doors can swing 180 degrees. Are any hardware changes required at this opening?

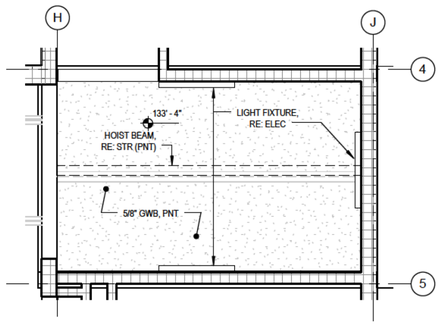
Suggestion

RFI 034

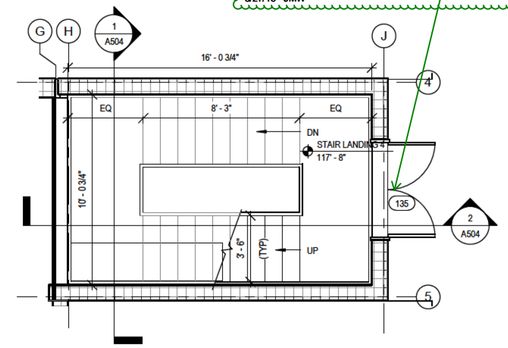
Answer — Date Answered: 8/27/2015

No hardware changes necessary.

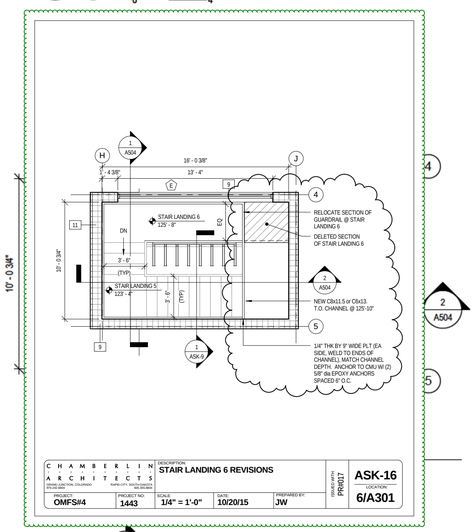
8/27/15 - JMW



8 A301 ENLARGED HOSE TOWER RCP

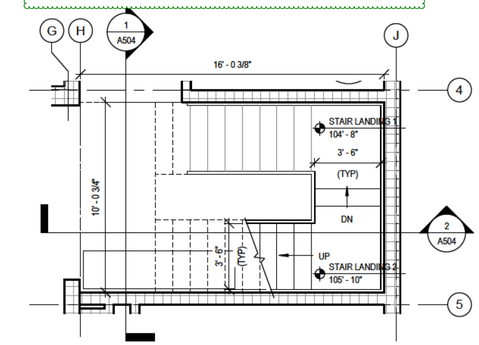


7 A301 ENLARGED 4TH STAIR LANDING

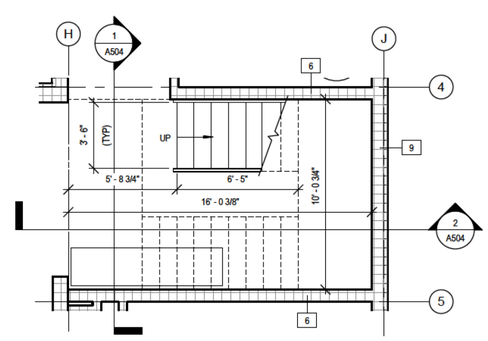


CHAMBERLIN ARCHITECTS GRAND JUNCTION, COLORADO 970.242.6804 RAPID CITY, SOUTH DAKOTA 605.355.6804	DESCRIPTION: STAIR LANDING 6 REVISIONS				ISSUED WITH: PR0017	ASK-16 LOCATION: 6/A301
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 1/4" = 1'-0"	DATE: 10/20/15	PREPARED BY: JW		

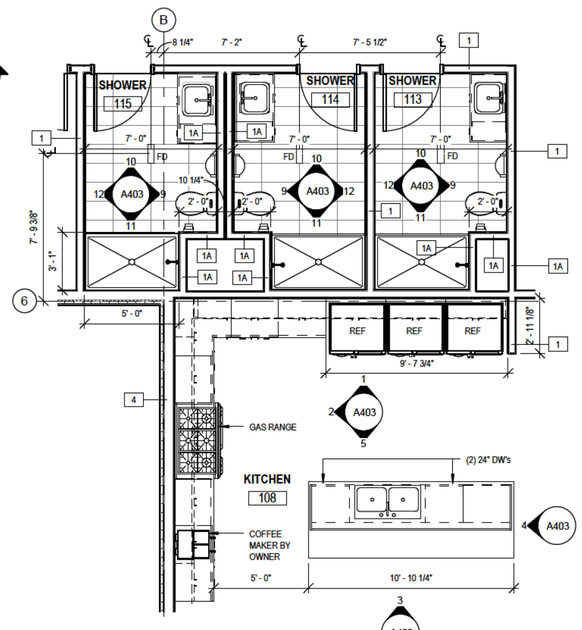
5 A301 ENLARGED 3RD STAIR LANDING



4 A301 ENLARGED 2ND STAIR LANDING

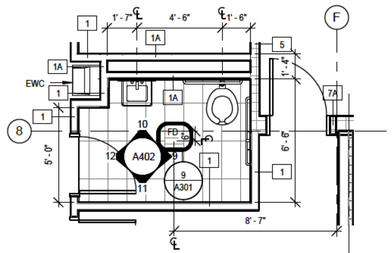


3 A301 ENLARGED 1ST FLOOR STAIR PLAN

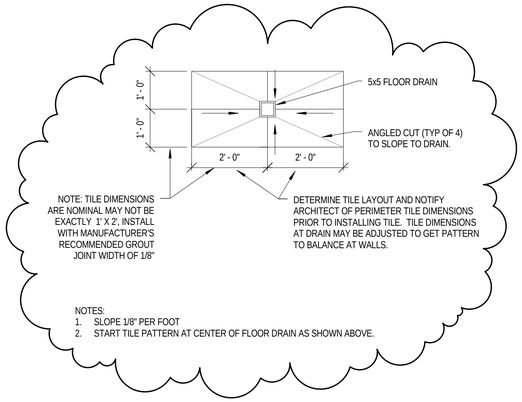


2 A301 ENLARGED FLOOR PLAN - KITCHEN 108

NOTE: RE 9/A301 FOR DETAIL at FLOOR DRAINS.



1 A301 ENLARGED FLOOR PLAN - TOILET 105



CHAMBERLIN ARCHITECTS GRAND JUNCTION, COLORADO 970.242.6804 RAPID CITY, SOUTH DAKOTA 605.355.6804	DESCRIPTION: REVISED FLOOR DRAIN SKETCH				ISSUED WITH: ASI#005	9 LOCATION: A301
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 1/2" = 1'-0"	DATE: 8/4/15	PREPARED BY: CSS		

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

ENLARGED FLOOR PLANS

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PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **A301**

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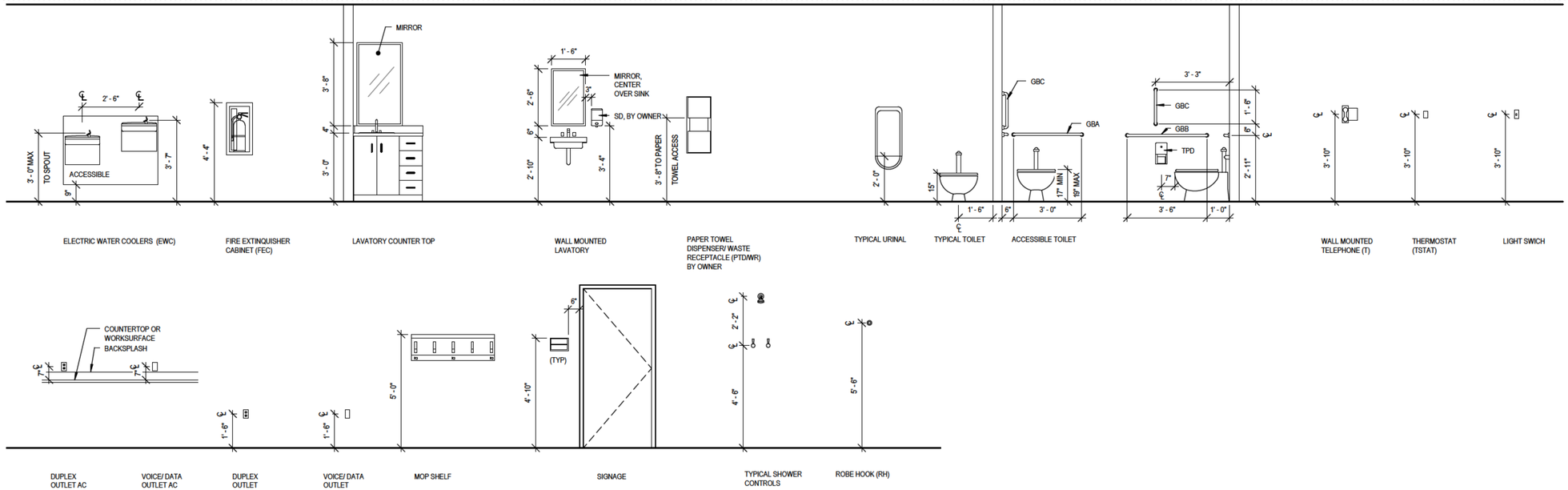
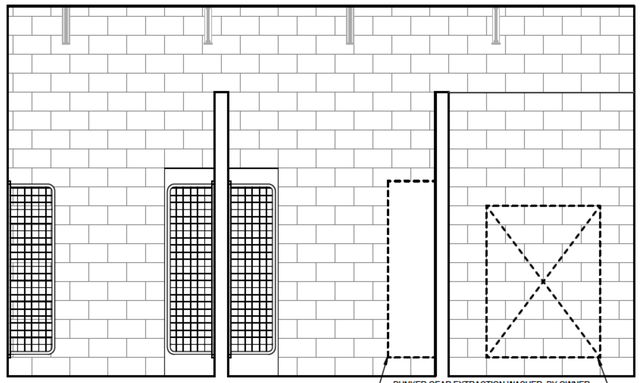


1 A401 TYPICAL ELEVATION HEIGHTS

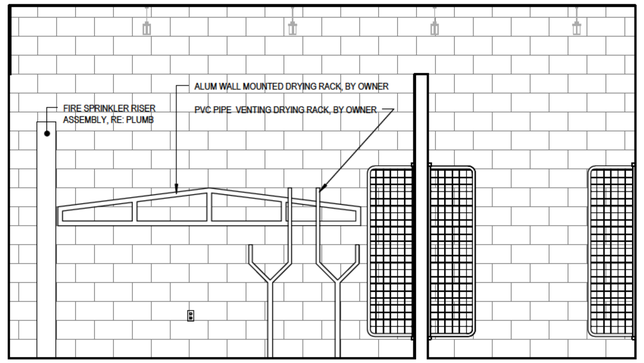
0' 2' 4'

NOTE: PROVIDE TREATED WD BLOCKING AT ALL WALL MOUNTED ACCESSORIES



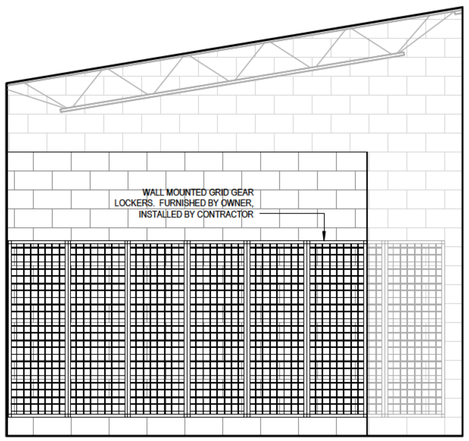
7 A401 BUNKER GEAR 133 WEST

0' 2' 4'



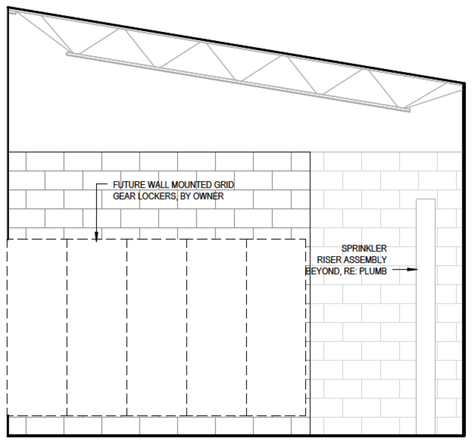
6 A401 BUNKER GEAR 133 EAST

0' 2' 4'



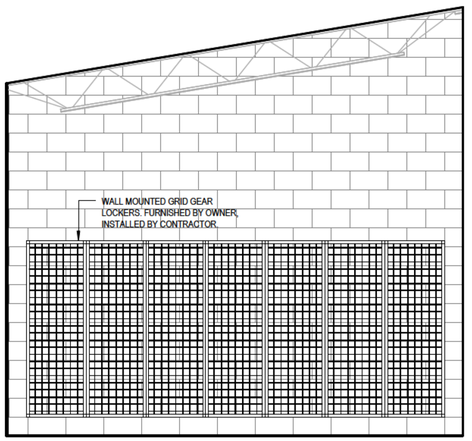
5 A401 BUNKER GEAR 133 CENTER LOCKERS SOUTH

0' 2' 4'



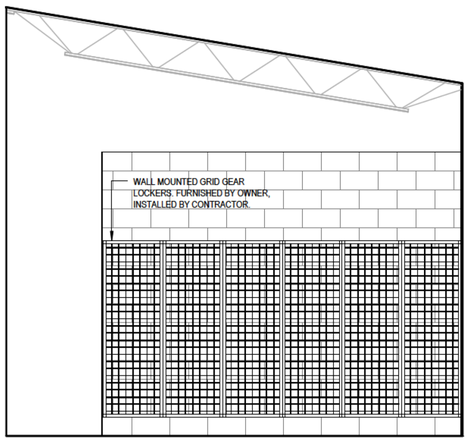
4 A401 BUNKER GEAR 133 NORTH

0' 2' 4'



3 A401 BUNKER GEAR 133 SOUTH

0' 2' 4'



2 A401 BUNKER GEAR 133 CENTER LOCKERS NORTH

0' 2' 4'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

INTERIOR ELEVATIONS

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PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A401

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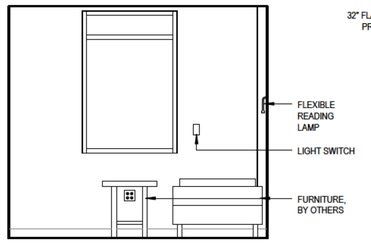
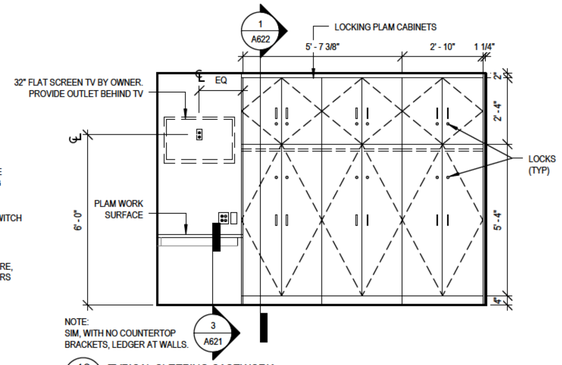
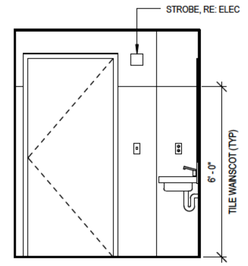


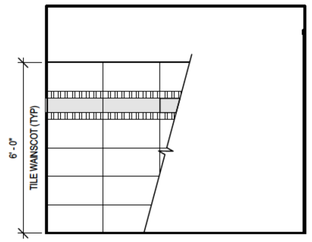
14 A402 TYPICAL SLEEPING UNIT WINDOW ELEVATION



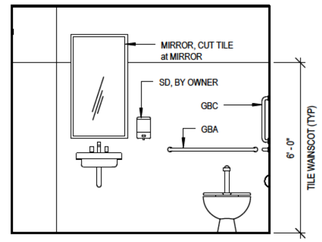
13 A402 TYPICAL SLEEPING CASEWORK



12 A402 TOILET 105 WEST



11 A402 TOILET 105 SOUTH



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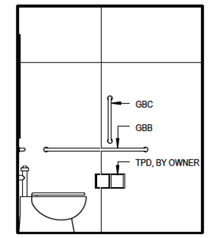
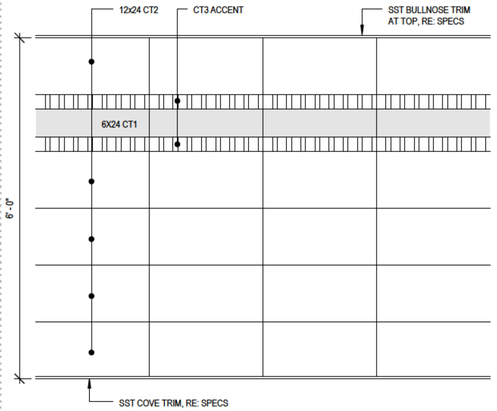
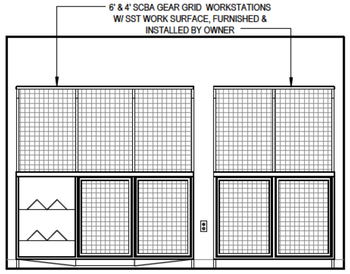


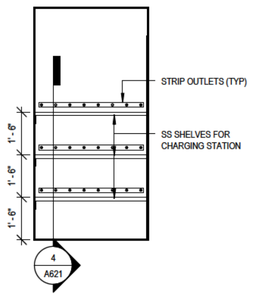
9 A402 TOILET 105 EAST



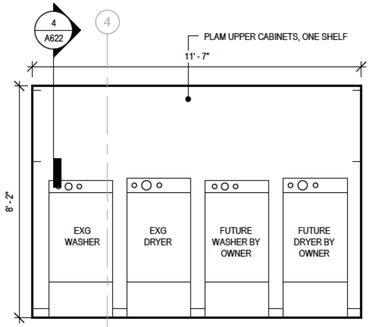
8 A402 TYPICAL TILE WAINSCOT PATTERN



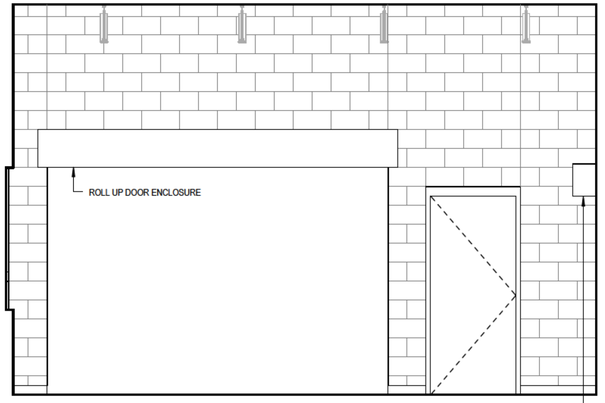
7 A402 SCBA REPAIR 130 WEST



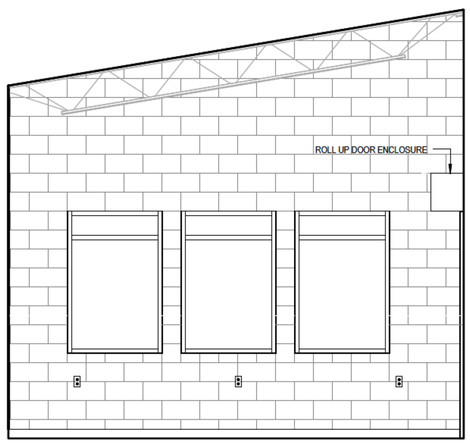
6 A402 HALL 109 SOUTH



5 A402 LAUNDRY 121 WEST



4 A402 FITNESS 132 WEST



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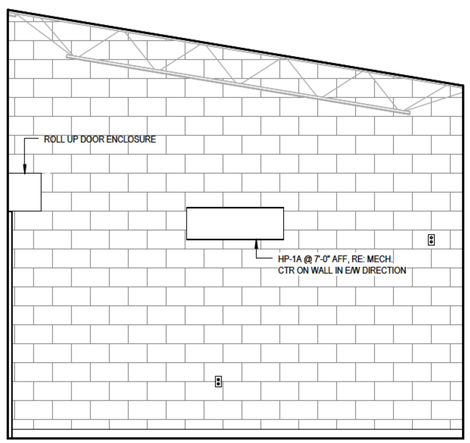
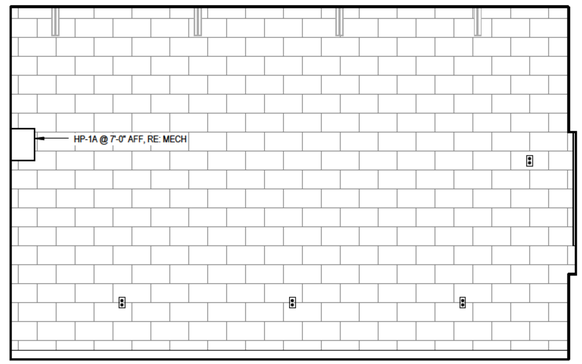


2 A402 FITNESS 132 NORTH



1 A402 FITNESS 132 EAST

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

INTERIOR ELEVATIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443

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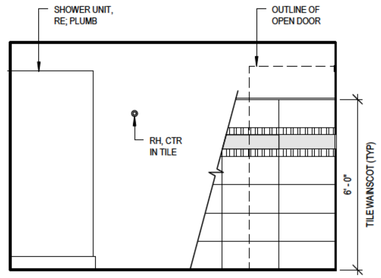
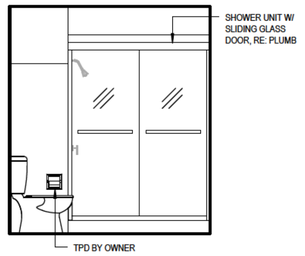
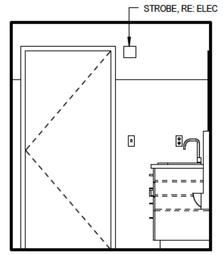


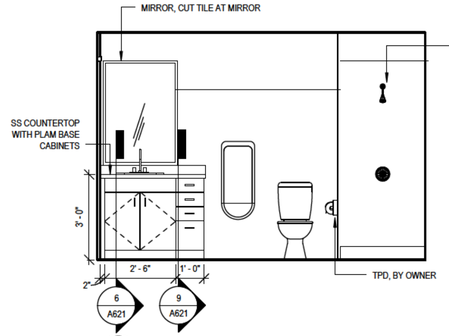
12 A403 SHOWER 113 & 115 WEST, 114 EAST OPH



11 A403 SHOWER 113 & 115 SOUTH, 114 SOUTH OPH



10 A403 SHOWER 113 & 115 NORTH, 114 NORTH OPH



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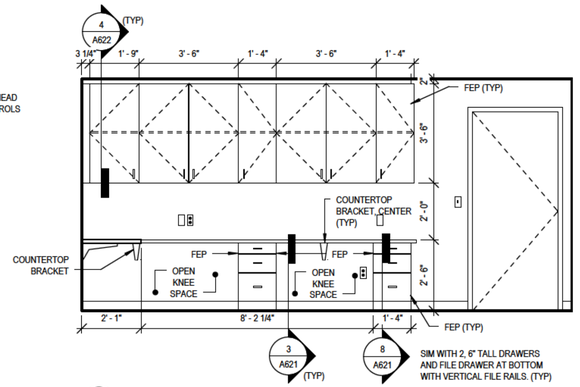
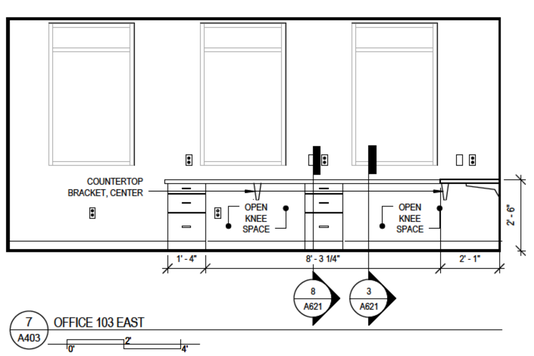


8 A403 OFFICE 103 WEST



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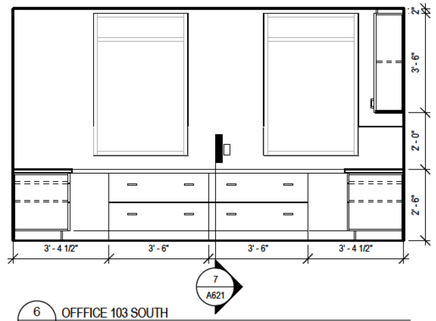
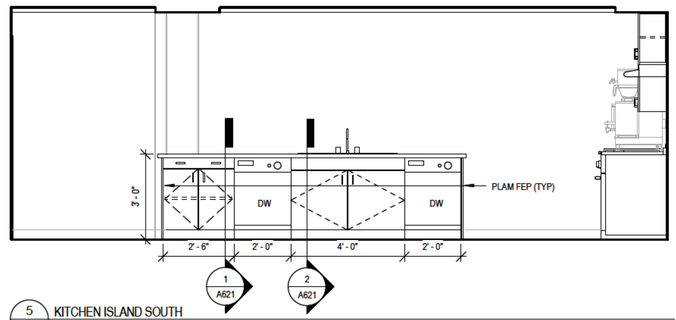
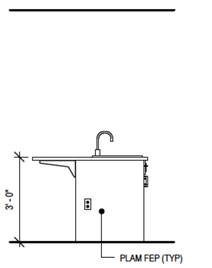


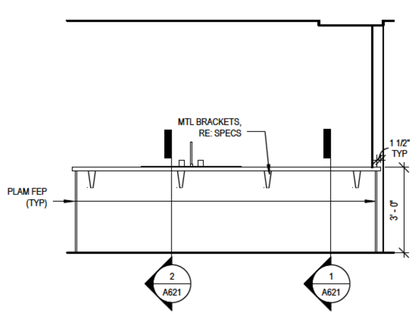
6 A403 OFFFICE 103 SOUTH



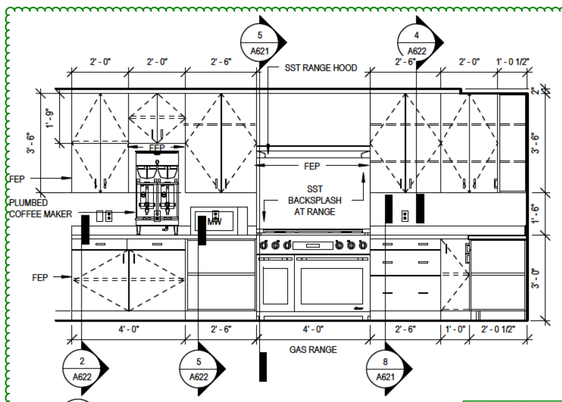
5 A403 KITCHEN ISLAND SOUTH



4 A403 KITCHEN ISLAND WEST, EAST SIM OPH

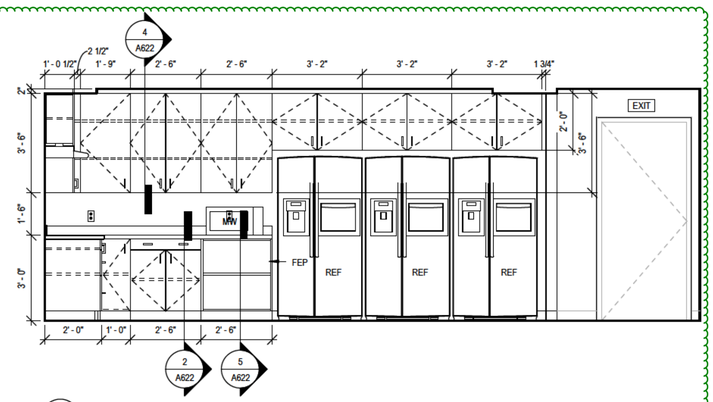


3 A403 KITCHEN ISLAND NORTH



2 A403 KITCHEN 108 WEST

See PR 13, following page



1 A403 KITCHEN 108 NORTH

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

INTERIOR ELEVATIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A403

PROJECT NO: 1443

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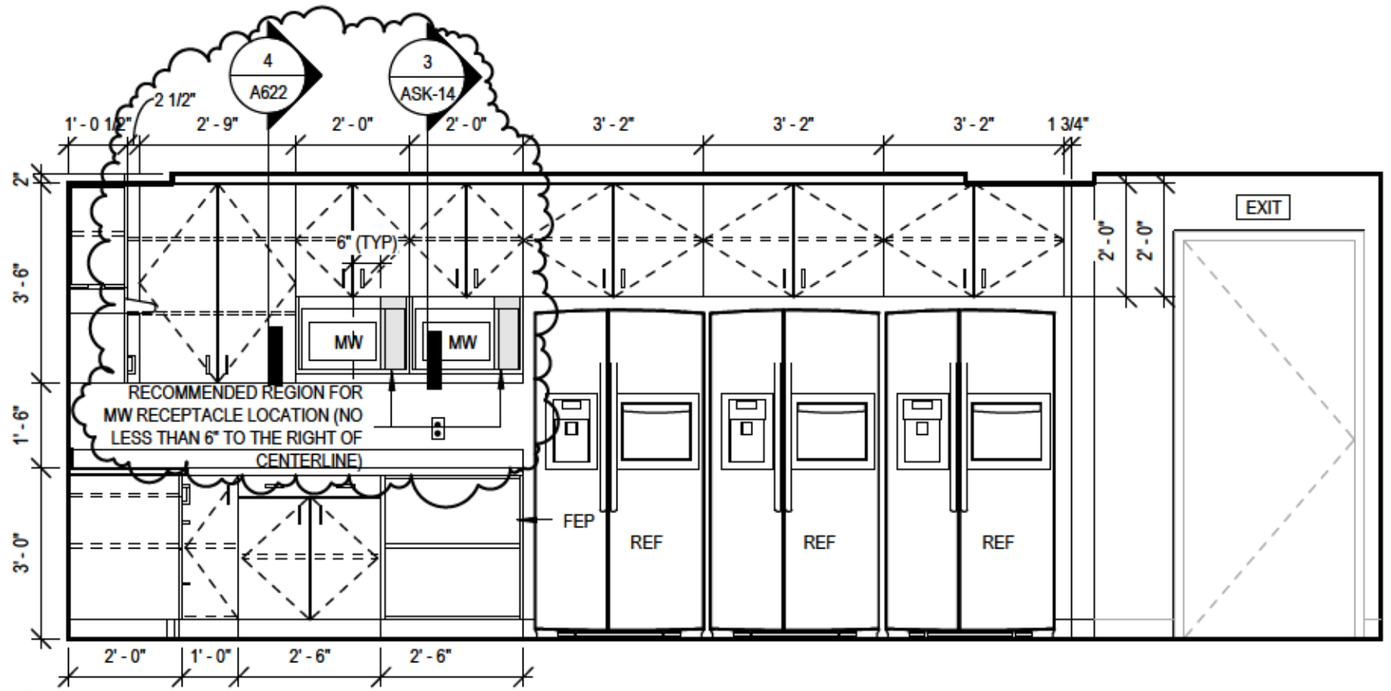
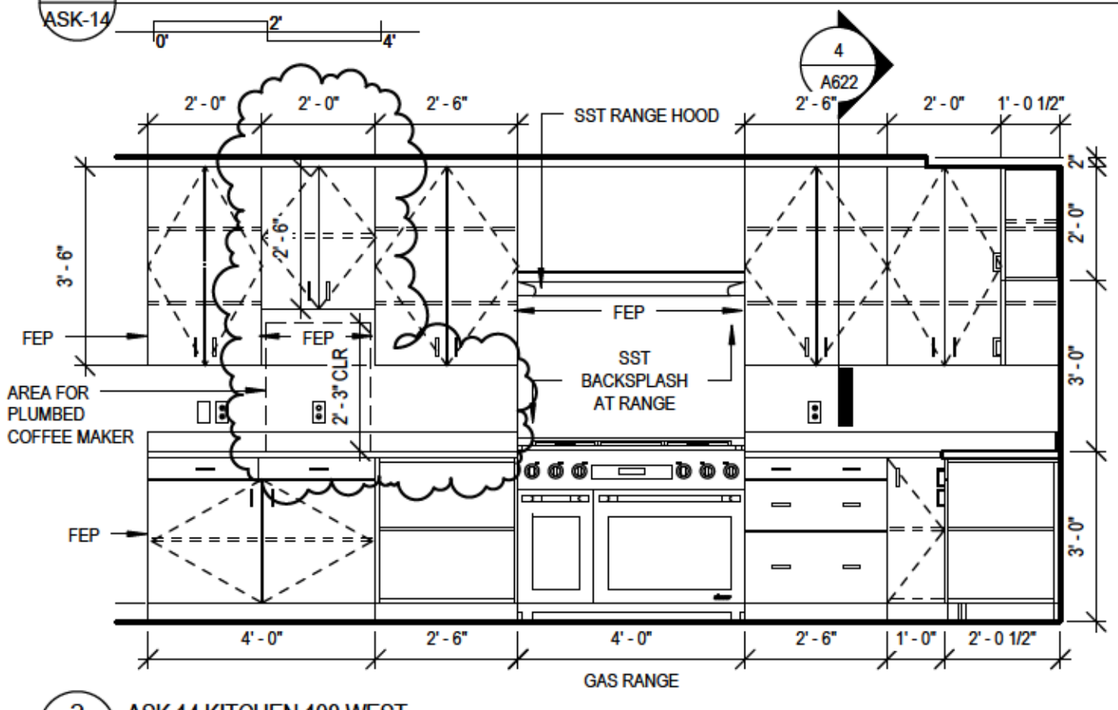


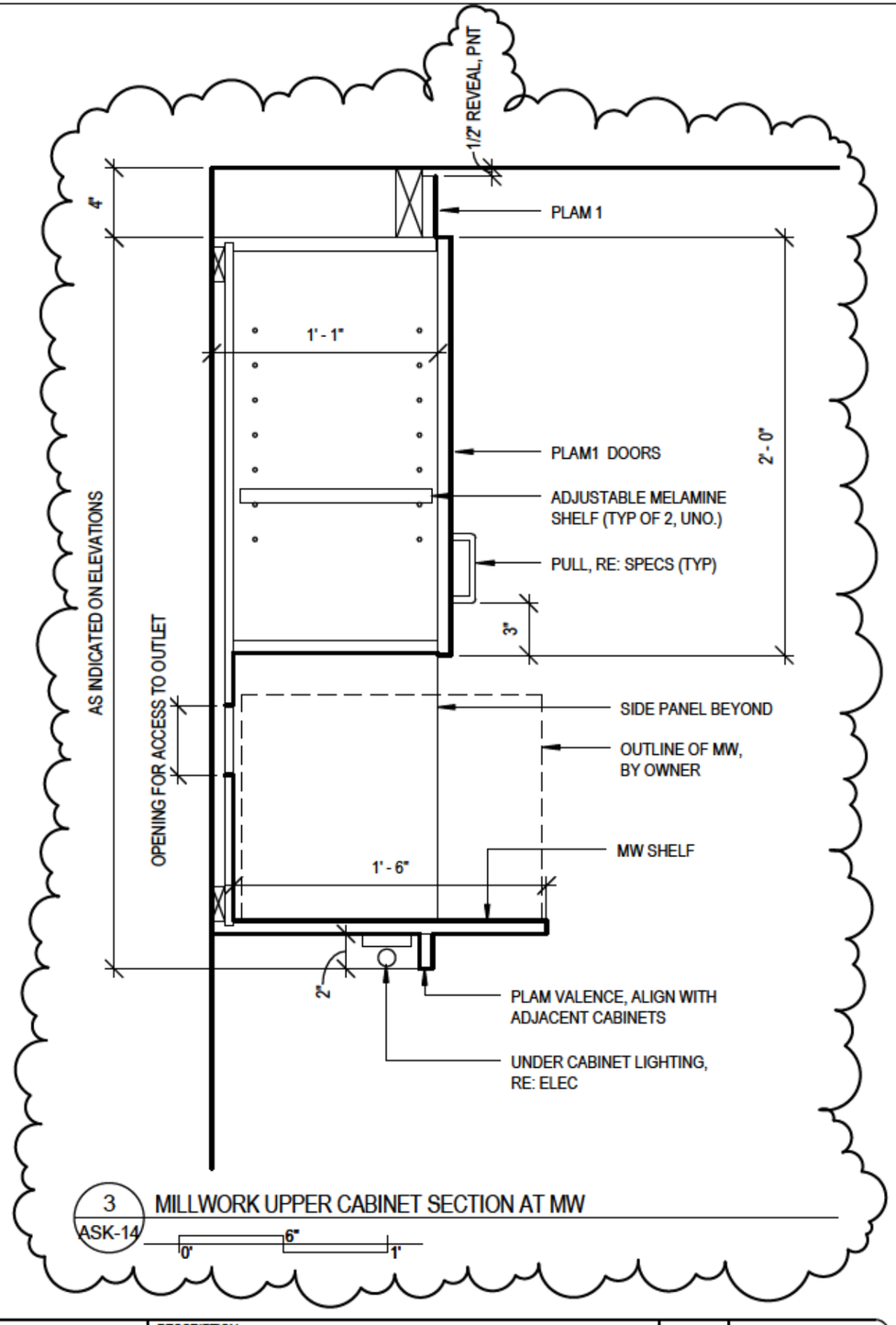
1 ASK-14 ASK 14 KITCHEN 108 NORTH

0' 2' 4'



2 ASK-14 ASK 14 KITCHEN 108 WEST

0' 2' 4'



3 ASK-14 MILLWORK UPPER CABINET SECTION AT MW

0' 6" 1'

CHAMBERLIN ARCHITECTS GRAND JUNCTION, COLORADO 970.242.6804 RAPID CITY, SOUTH DAKOTA 605.355.6804		DESCRIPTION: PR #13 TO RELOCATE MICROWAVES AND ADJUST UPPER CABINET AT COFFEE MAKER			ISSUED WITH: PR#0013	1&2 LOCATION: A403
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: As indicated	DATE: 9/15/15	PREPARED BY: CSS		

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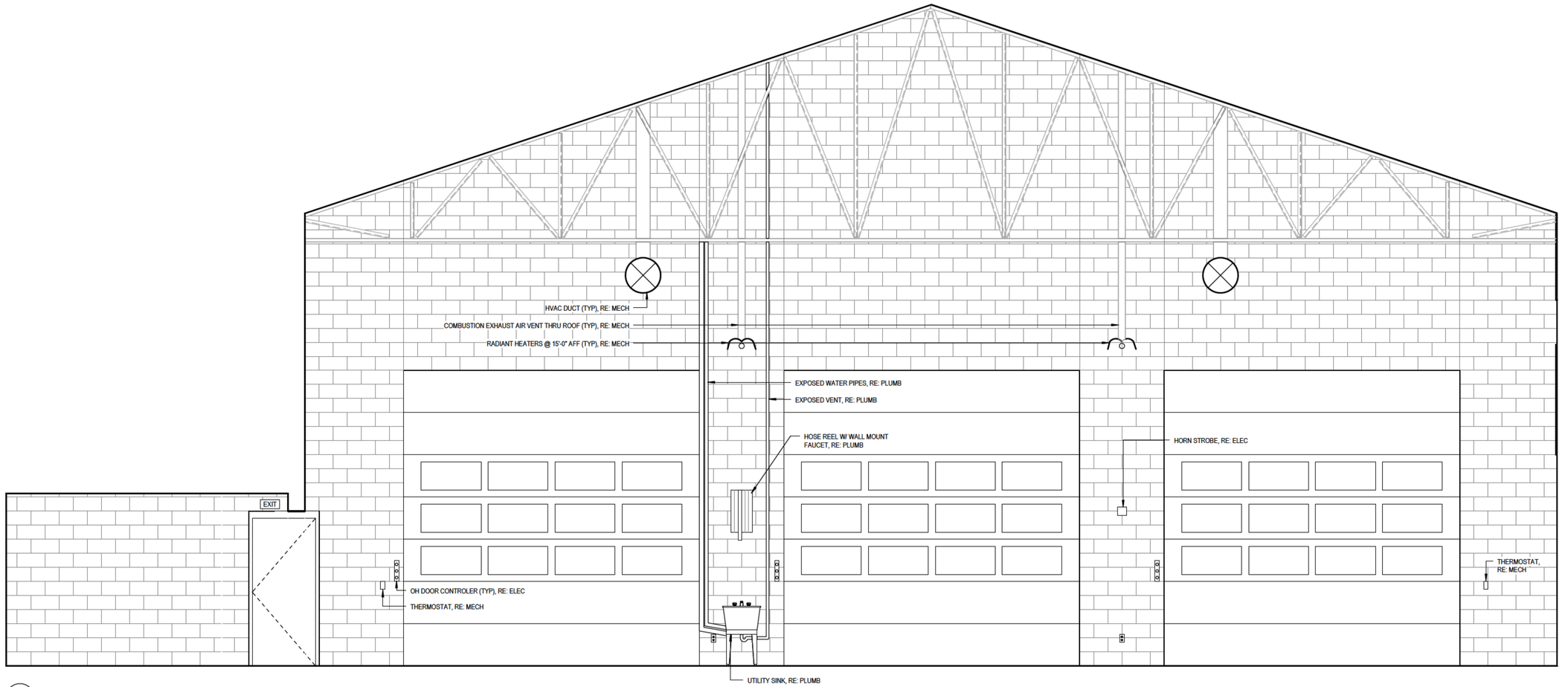

1 / A404 APPARATUS BAY NORTH

0' 2' 4'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

INTERIOR ELEVATIONS

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PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A404

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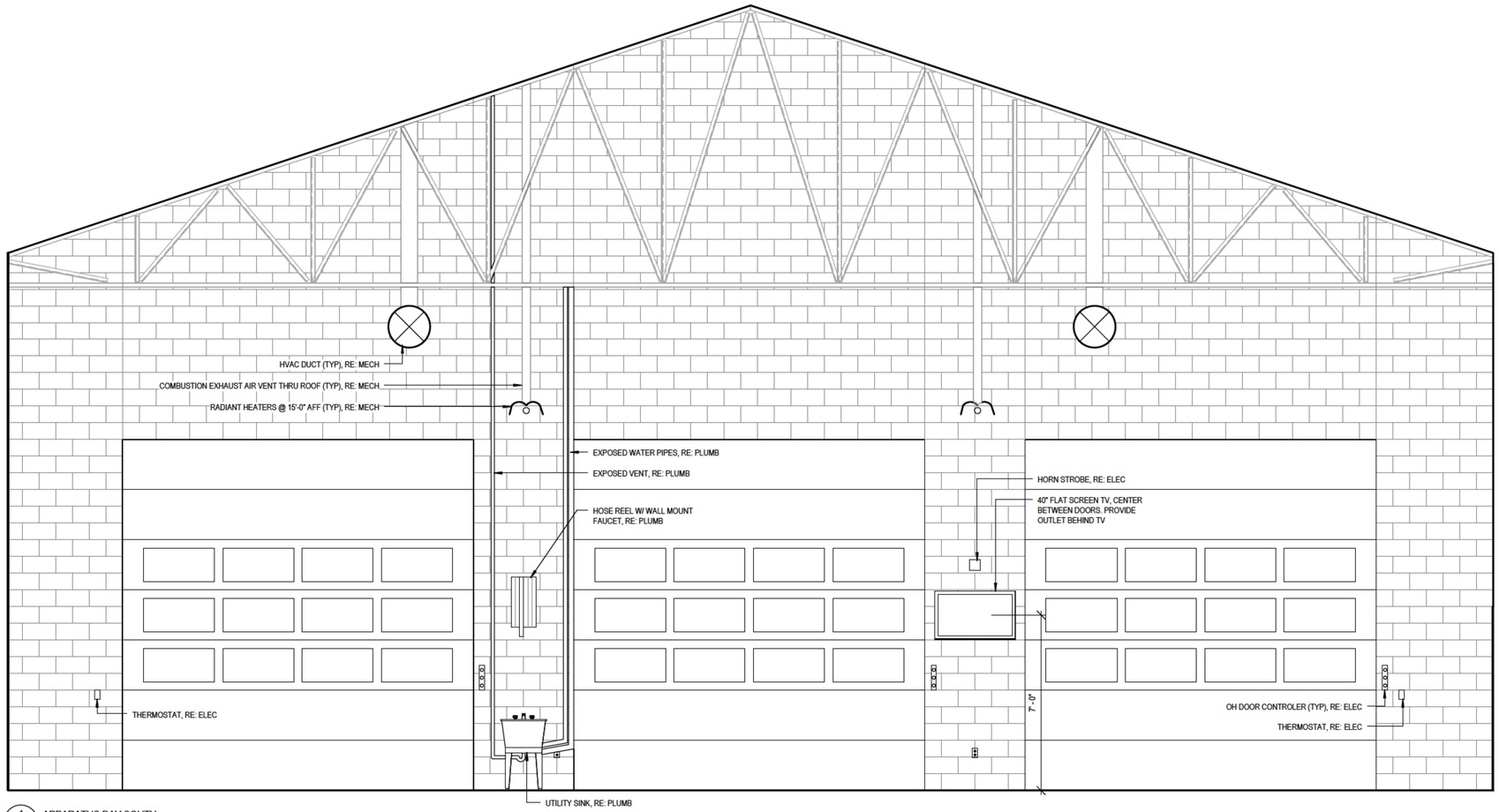

1 A405 APPARATUS BAY SOUTH

0' 2' 4'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

INTERIOR ELEVATIONS

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DATE: 04/10/2015 SHEET NO: A405

PROJECT NO: 1443

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ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

OWNER
ARCHITECT
CONTRACTOR
FIELD
OTHER

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

ARCHITECT'S SUPPLEMENTAL INSTRUCTION NO: Seven (7)

ARCHITECT: Chamberlin Architects
437 Main Street
Grand Junction, CO 81501

ARCHITECT'S PROJECT NO: 1443

DATE OF ISSUANCE: August 28, 2015

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

1. Per on-site meeting with architect, structural engineer, electrician & superintendent all electrical conduit runs (and associated boxes) at masonry shear wall locations to be surface mounted. Existing conduit (and box) on Grid Line F near corner of Mech 126 to be abandoned in place and filled with concrete. Existing conduit (and box) on Grid Line 8 (east of Door 103B) to remain. Alerting system boxes to be field modified for surface mounting. All exposed electrical conduits and boxes to be painted to match adjacent wall color.

Attachments: none

ARCHITECT: Chamberlin Architects, P.C.

BY: Jonathan West

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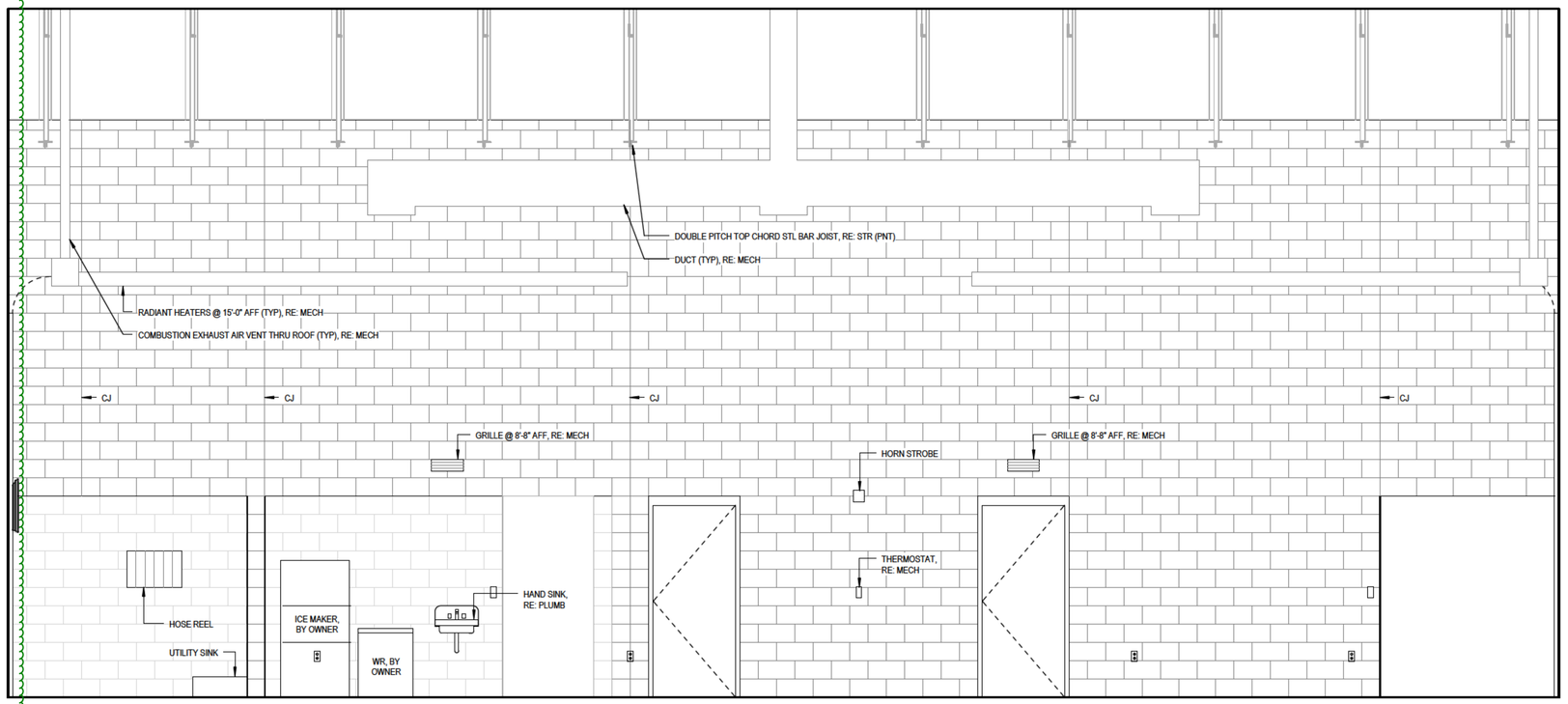
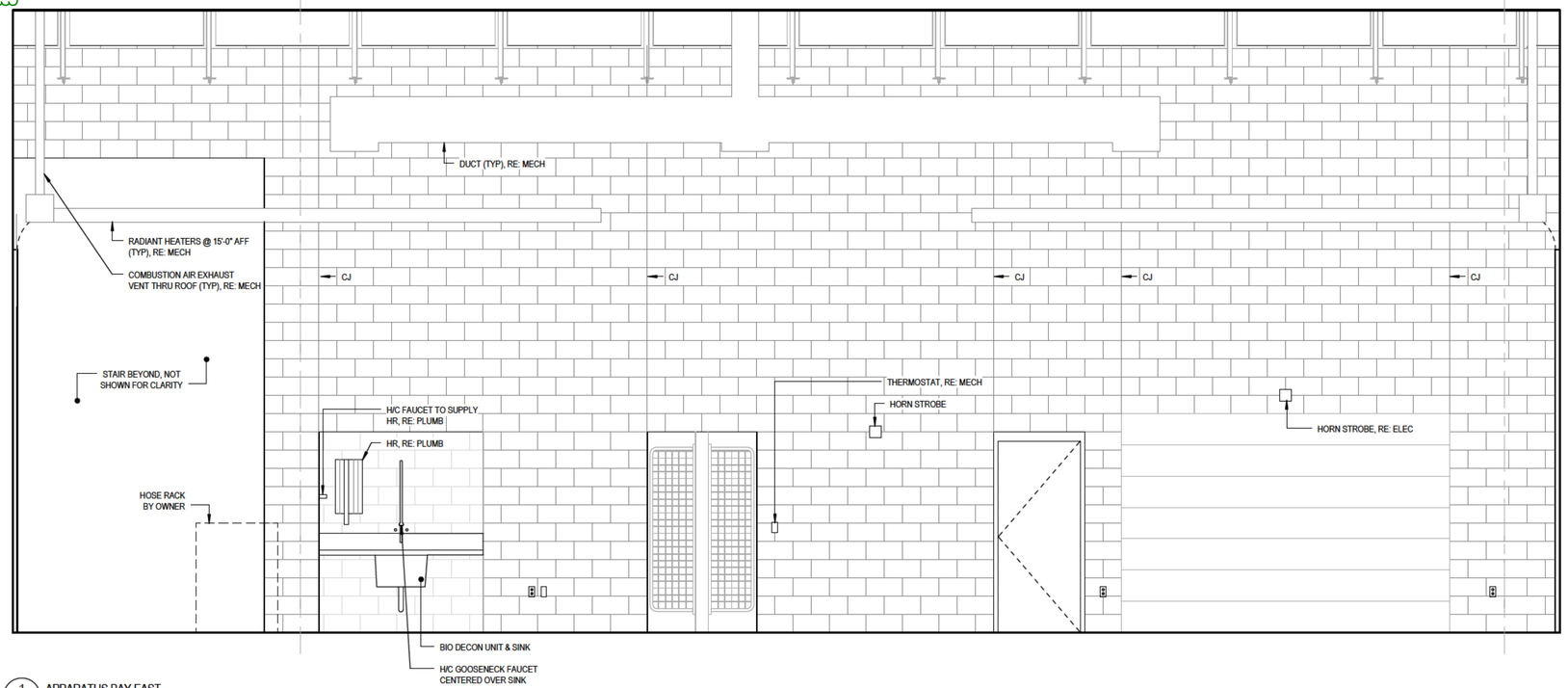


2 A406 APPARATUS BAY WEST

0' 2' 4'



1 A406 APPARATUS BAY EAST

0' 2' 4'

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

INTERIOR ELEVATIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **A406**

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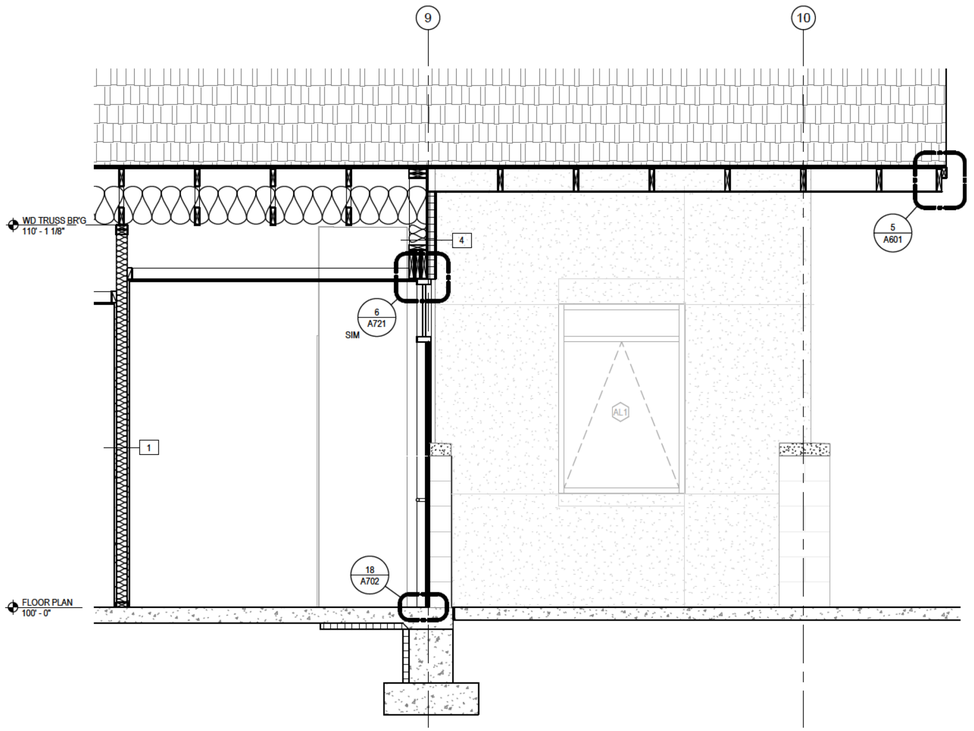
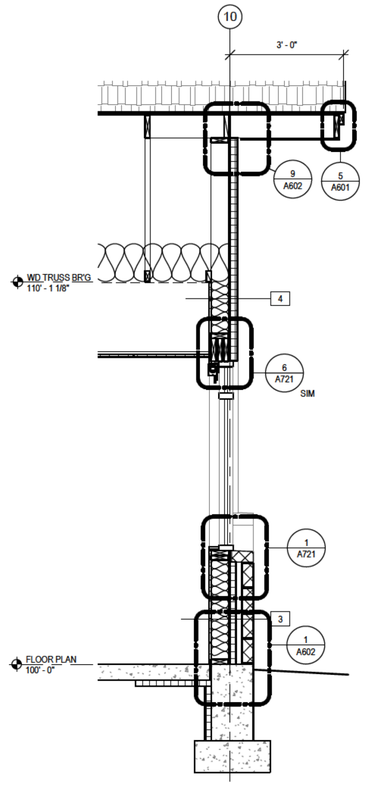
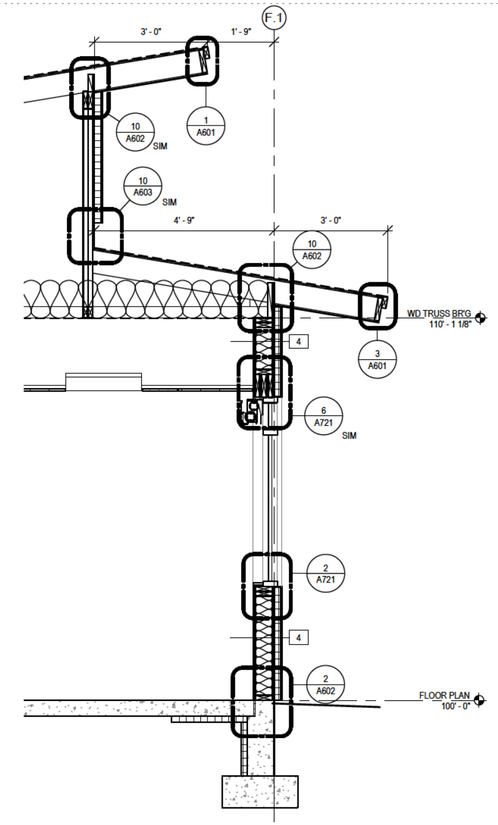


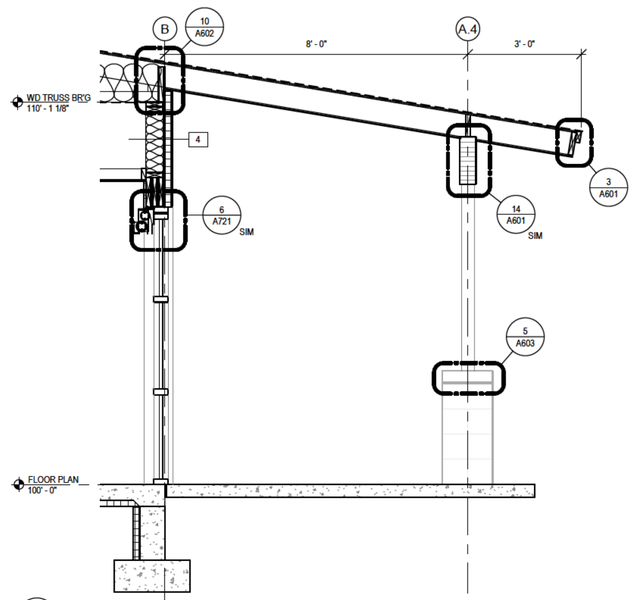
6 A501 WALL SECTION 3



5 A501 WALL SECTION 2



4 A501 WALL SECTION 1



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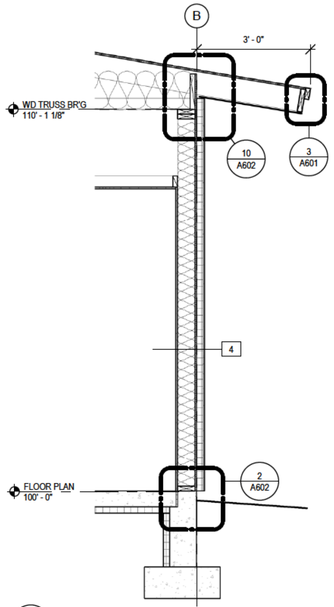

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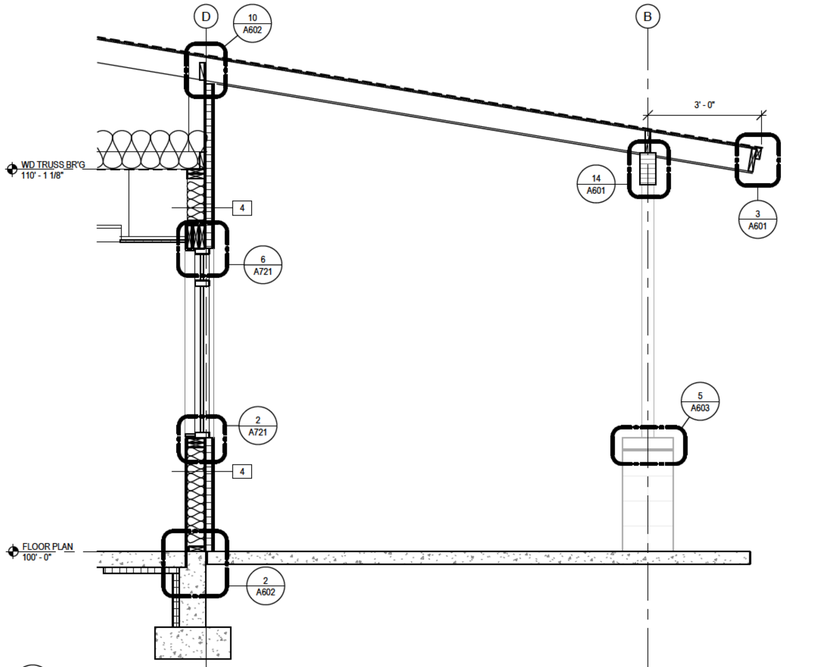

1 A501 WALL SECTION 4

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

WALL SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A501

PROJECT NO: 1443

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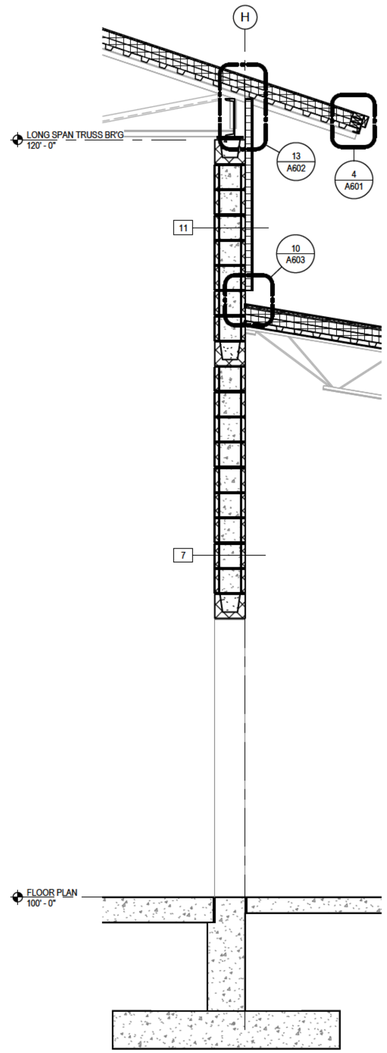
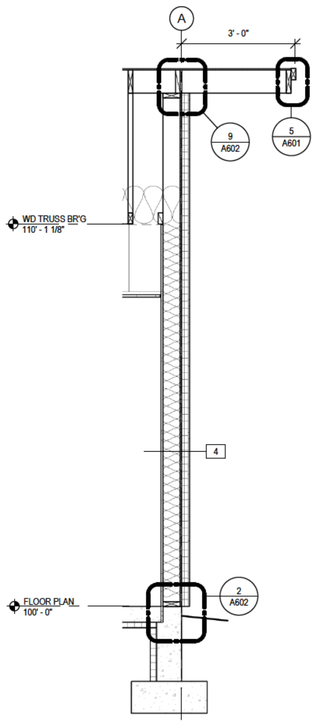
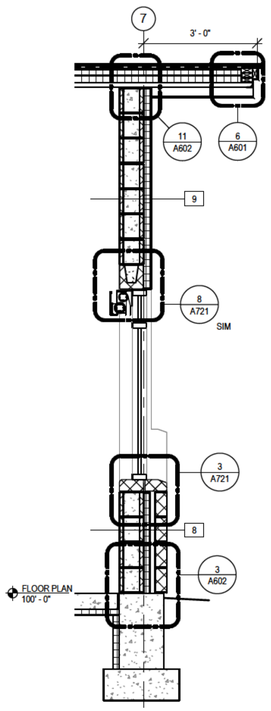


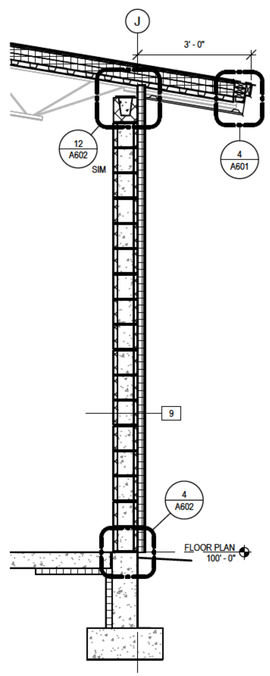
6 A502 WALL SECTION 7



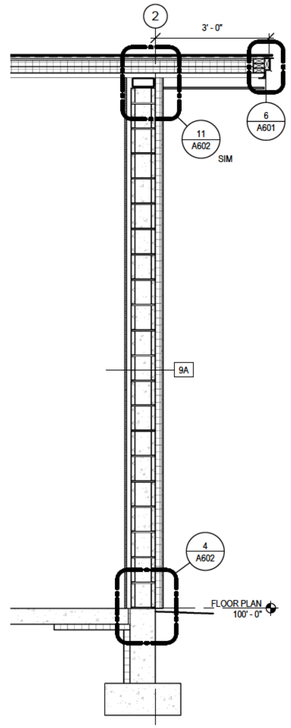
5 A502 WALL SECTION 14



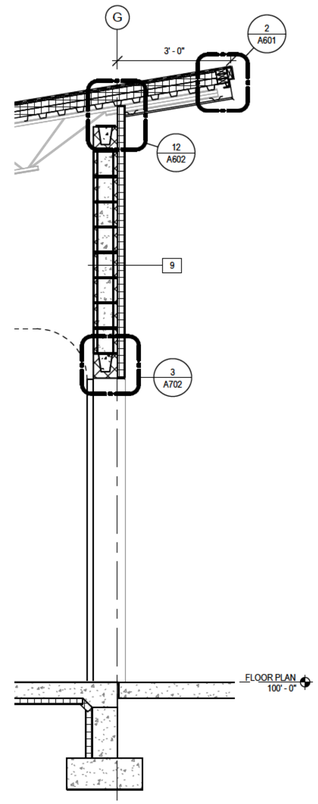
4 A502 WALL SECTION 13



3 A502 WALL SECTION 12



2 A502 WALL SECTION 11



1 A502 WALL SECTION 10

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

WALL SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A502

PROJECT NO: 1443

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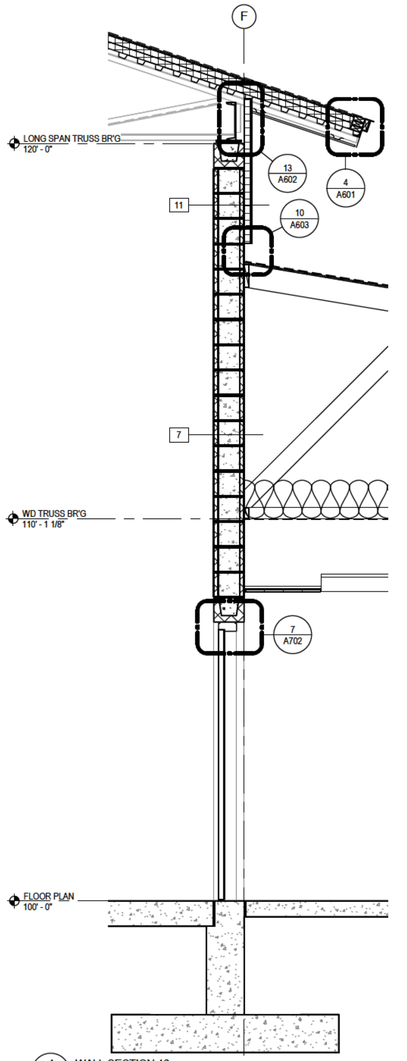
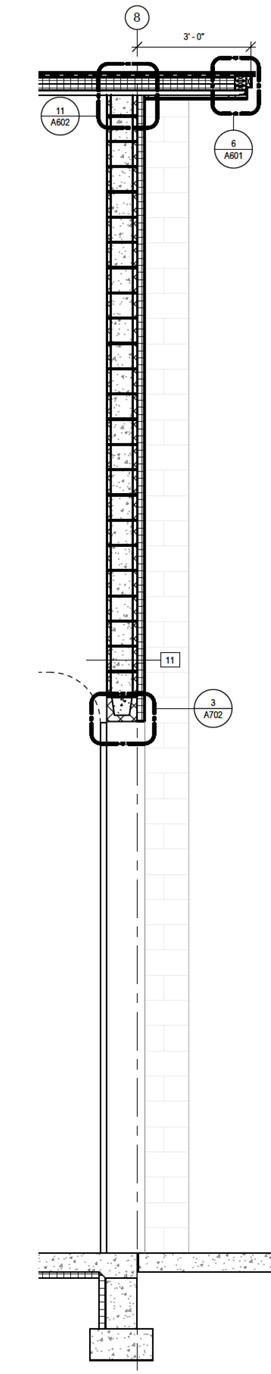


4 A503 WALL SECTION 16



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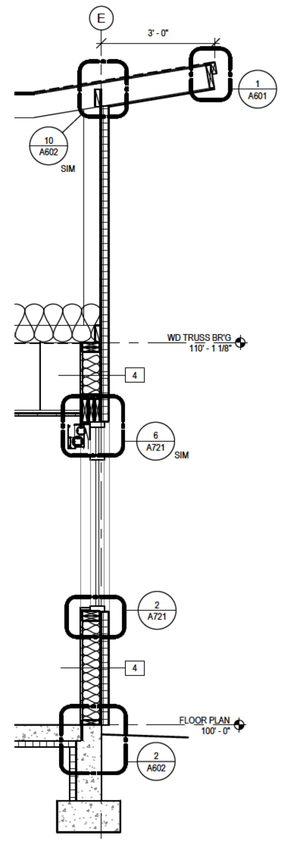

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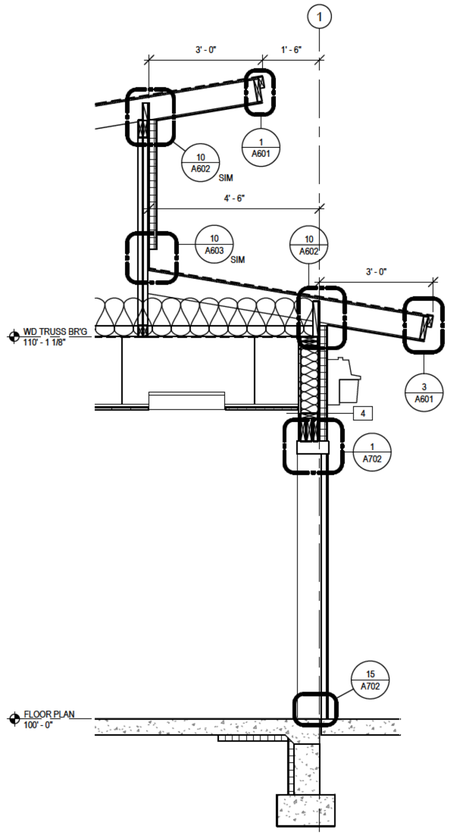

1 A503 WALL SECTION 8

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Rapid City, South Dakota 57701
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

WALL SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A503

PROJECT NO: 1443

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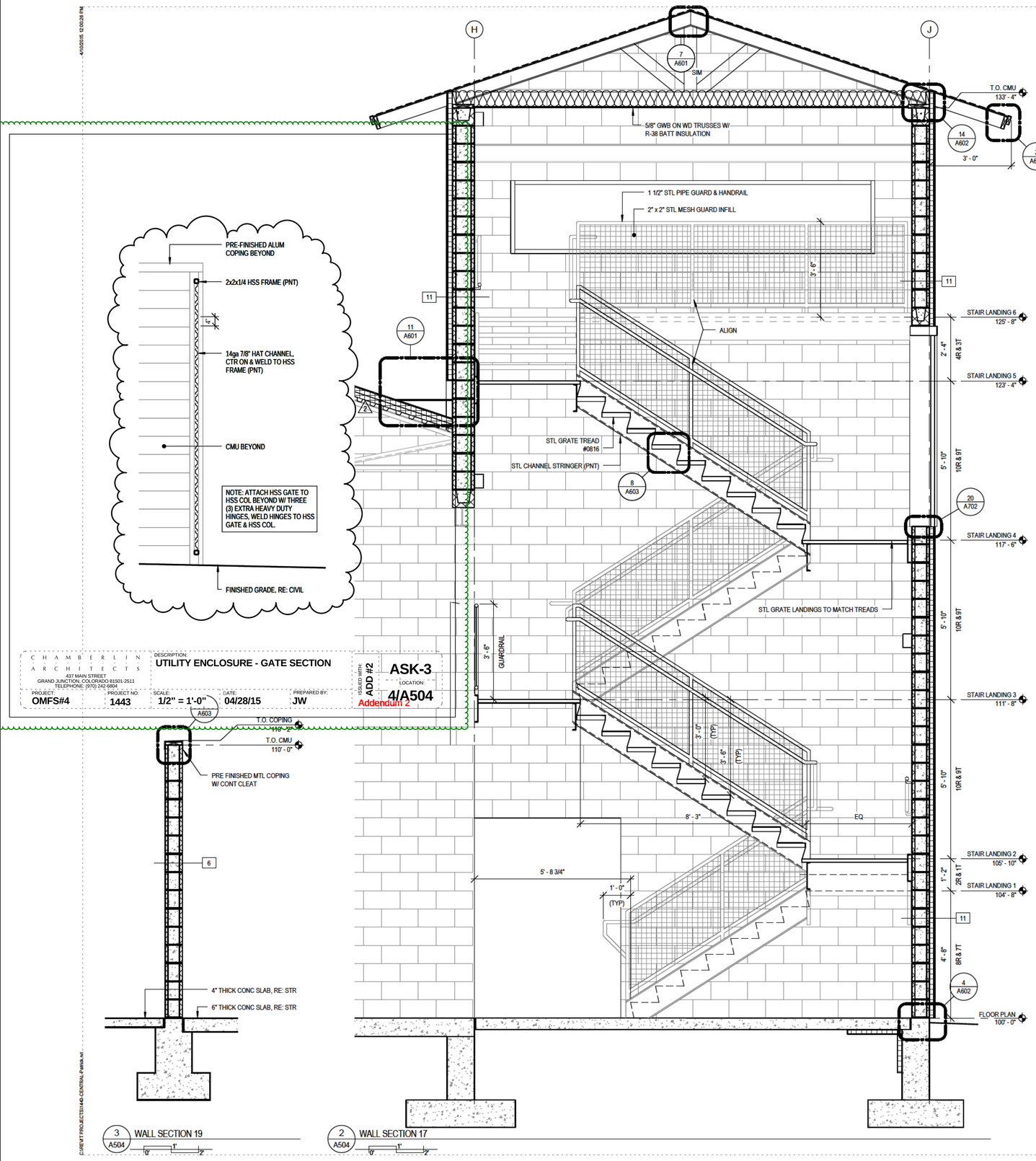
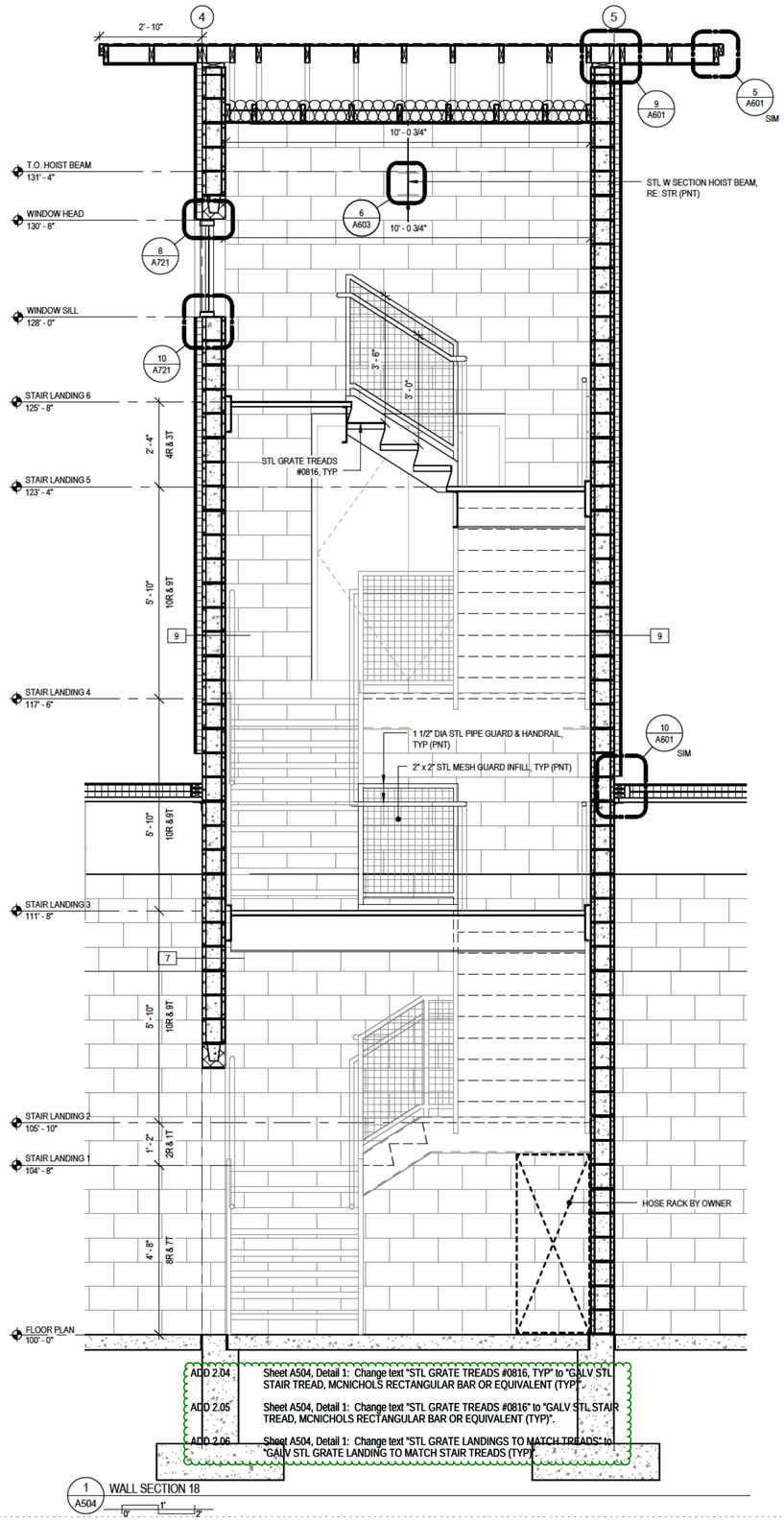


3 A504 WALL SECTION 19

2 A504 WALL SECTION 17



ADD 2.04 Sheet A504, Detail 1: Change text "STL GRATE TREADS #0816, TYP" to "GALV STL STAIR TREAD, MCNICHOLS RECTANGULAR BAR OR EQUIVALENT (TYP)".

ADD 2.05 Sheet A504, Detail 1: Change text "STL GRATE TREADS #0816" to "GALV STL STAIR TREAD, MCNICHOLS RECTANGULAR BAR OR EQUIVALENT (TYP)".

ADD 2.06 Sheet A504, Detail 1: Change text "STL GRATE LANDINGS TO MATCH TREADS" to "GALV STL GRATE LANDING TO MATCH STAIR TREADS (TYP)".

1 A504 WALL SECTION 18

C H A M B E R L I N
A R C H I T E C T S
437 MAIN STREET
GRAND JUNCTION, COLORADO 81501-2511
TELEPHONE: (970) 242-6804

DESCRIPTION: UTILITY ENCLOSURE - GATE SECTION

ISSUED WITH: ADD #2 — ASK-3

LOCATION: 4/A504

PROJECT:	PROJECT NO:	SCALE:	DATE:	PREPARED BY:
OMFS#4	1443	1/2" = 1'-0"	04/28/15	JW

Addendum 2

C H A M B E R L I N
A R C H I T E C T S
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

WALL SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A504

PROJECT NO: 1443

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C:\REVIT PROJECTS\1443-CENTRAL.PARISH.rvt 4/10/2015 12:00:29 PM

PROPOSAL REQUEST

FIELD
OWNER
ARCHITECT
CONTRACTOR

PROJECT: Orchard Mesa Fire Station #4

PROPOSAL REQUEST NO: Ten (10)

OWNER: City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

DATE: July 30, 2016

ARCHITECT'S PROJECT NO: 1443

CONTRACT DATED: December 18, 2014

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

Please submit an itemized quotation for changes in the Contract Sum and/or Time incident to proposed modifications to the Contract Documents described herein.

THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

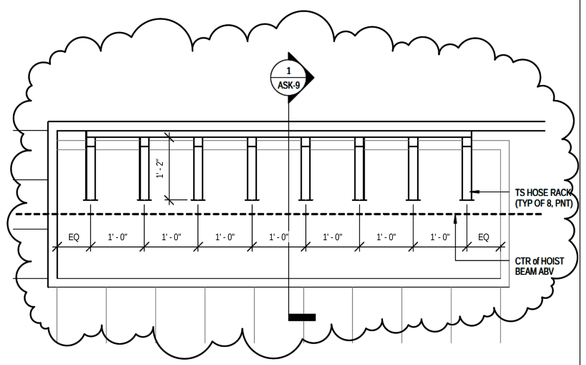
Description:

1. Add TS hose rack assembly as illustrated in the attached Sketches ASK-8 & ASK-9.
2. Add belay tie off assembly as illustrated in the attached Sketches ASK-10 & SSK-5.

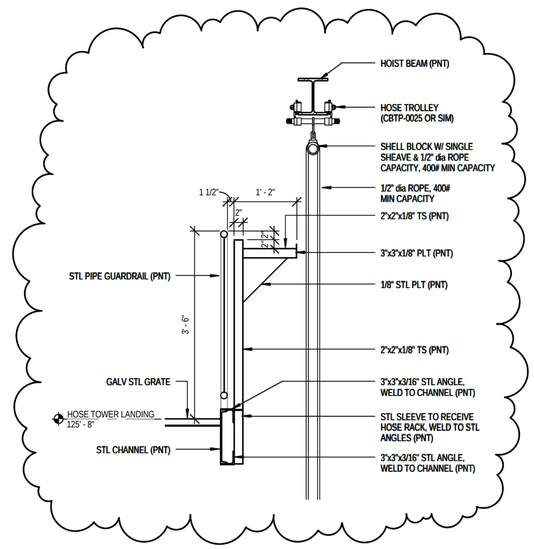
Attachments: ASK-8; ASK-9; ASK-10; SSK-5

ARCHITECT: Chamberlin Architects, P.C.
BY: Jonathan West

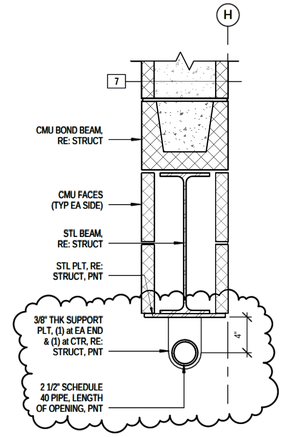
S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\PROPOSAL REQUESTS\PR#010.1443.doc



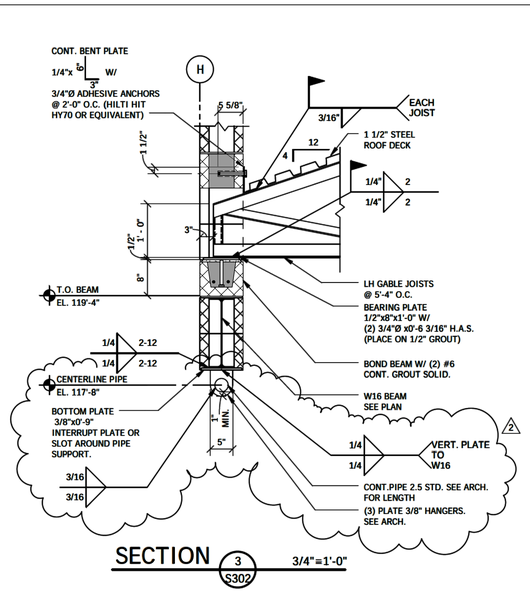
CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: HOSE TOWER - HOSE RACK PLAN	ISSUED WITH: PR#010	ASK-8 LOCATION:
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 3/4" = 1'-0"	DATE: 7/30/15	PREPARED BY: JW



CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: HOSE TOWER - HOSE RACK SECTION	ISSUED WITH: PR#010	ASK-9 LOCATION:
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 3/4" = 1'-0"	DATE: 7/30/15	PREPARED BY: JW



CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: BELAY TIE OFF DTL	ISSUED WITH: PR#010	ASK-10 LOCATION:
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 1 1/2" = 1'-0"	DATE: 7/30/15	PREPARED BY: JW



CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: DETAIL REVISION	ISSUED WITH: PR #10	SSK-5 LOCATION: S302
PROJECT: O.M.F.S. #4	PROJECT NO: 14.108	SCALE: AS NOTED	DATE: 07/30/15	PREPARED BY: KDN

PROPOSAL REQUEST

FIELD
OWNER
ARCHITECT
CONTRACTOR

PROJECT: Orchard Mesa Fire Station #4

PROPOSAL REQUEST NO: Eleven (11)

OWNER: City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

DATE: July 31, 2016

ARCHITECT'S PROJECT NO: 1443

CONTRACT DATED: December 18, 2014

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

Please submit an itemized quotation for changes in the Contract Sum and/or Time incident to proposed modifications to the Contract Documents described herein.

THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

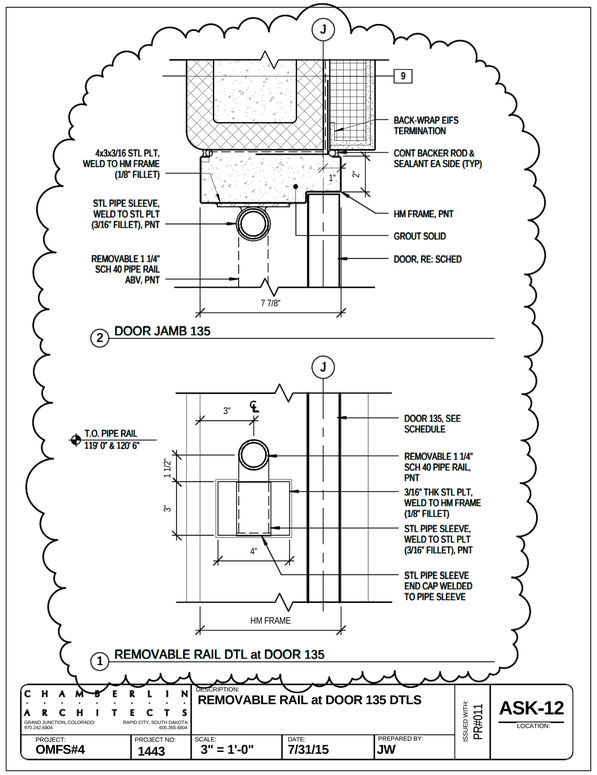
Description:

1. Add removable rails (one at 119'-0" AFF and one at 120'-6" AFF) at Door 135 as illustrated in the attached Sketch ASK-12.

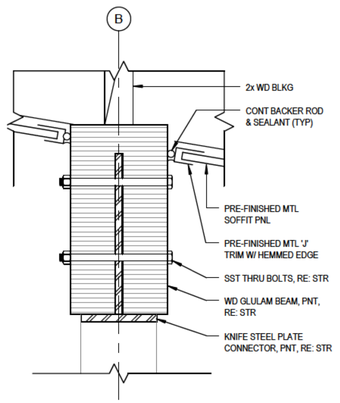
Attachments: ASK-12

ARCHITECT: Chamberlin Architects, P.C.
BY: Jonathan West

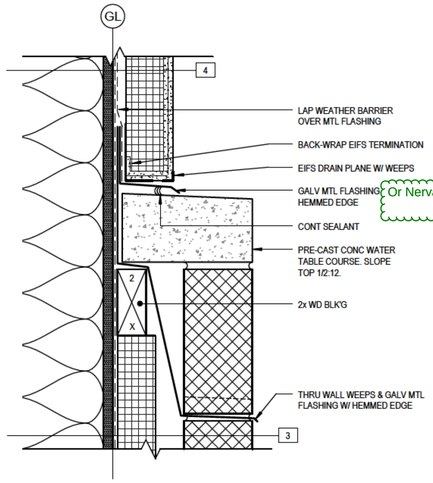
S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\PROPOSAL REQUESTS\PR#011.1443.doc



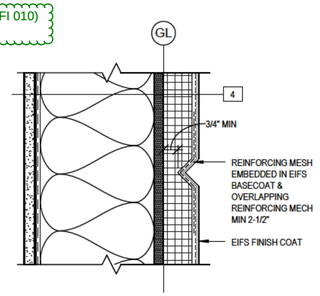
CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: REMOVABLE RAIL at DOOR 135 DTLS	ISSUED WITH: PR#011	ASK-12 LOCATION:
PROJECT: OMFS#4	PROJECT NO: 1443	SCALE: 3" = 1'-0"	DATE: 7/31/15	PREPARED BY: JW



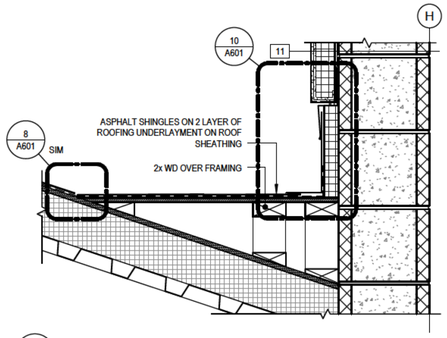
14 A601 GLULAM/STEEL COLUMN CONNECTION DETAIL



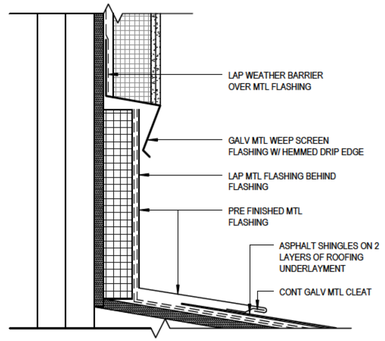
13 A601 PRE-CAST WATER TABLE DETAIL



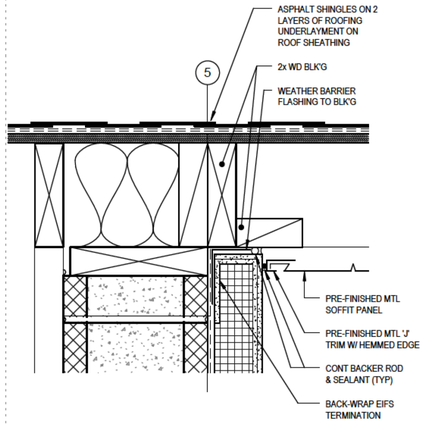
12 A601 TYP EIFS REVEAL DETAIL



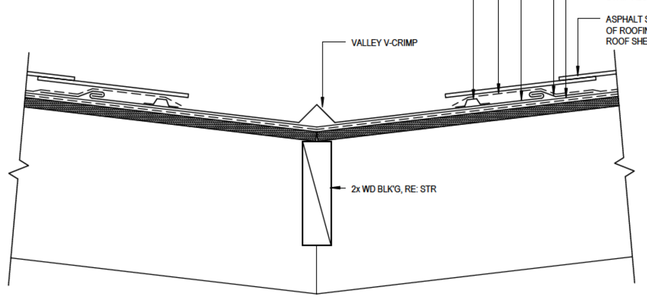
11 A601 CRICKET ROOF DETAIL



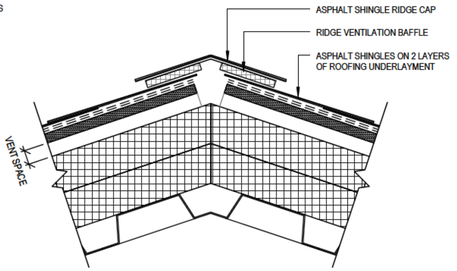
10 A601 EIFS COUNTERFLASHING DETAIL



9 A601 EIFS @ MTL PNL SOFFIT DETAIL 7

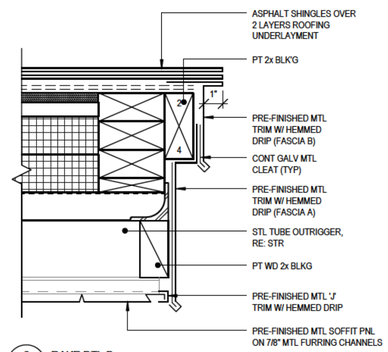


8 A601 ROOF VALLEY DETAIL

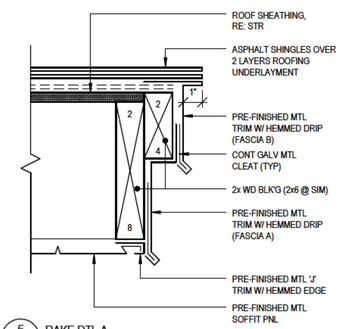


7 A601 ROOF RIDGE DETAIL

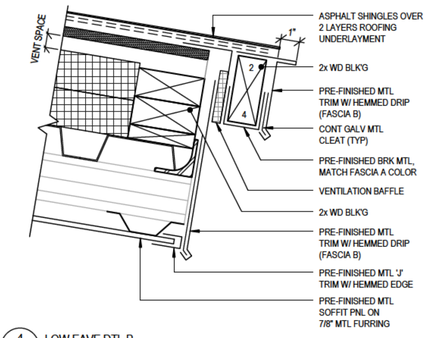
NOTE: OMIT RIGID INSULATION & VENTING, PROVIDE PWD DECK IN LIEU OF MTL DECK @ SIM



6 A601 RAKE DTL B



5 A601 RAKE DTL A



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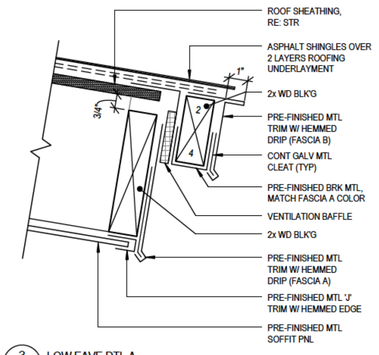

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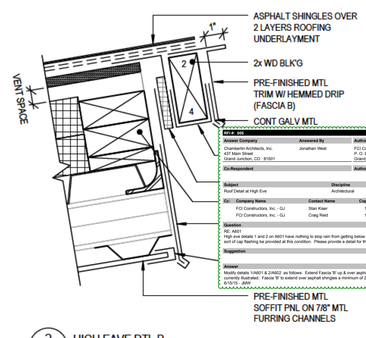
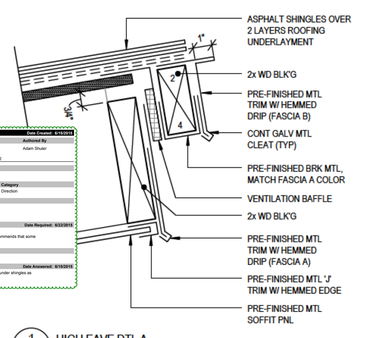


2 A601 HIGH EAVE DTL B



1 A601 HIGH EAVE DTL A

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CHAMBERLIN ARCHITECTS

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Rapid City, South Dakota 57701
T 605.355.6804

www.chamberlinarchitects.com

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

ARCHITECTURAL DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A601

PROJECT NO: 1443

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4/10/2015 12:00:28 PM
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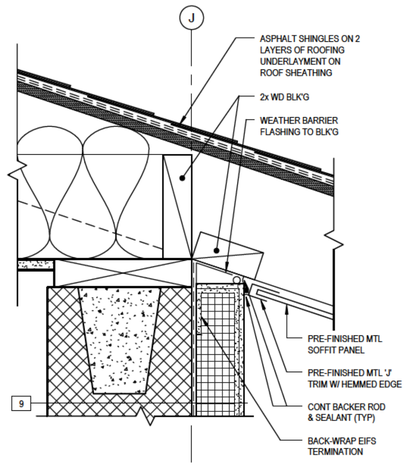
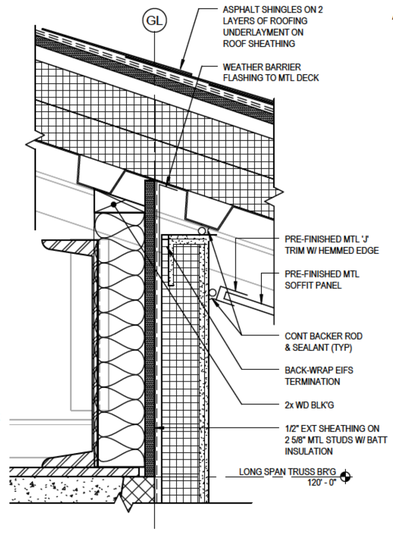
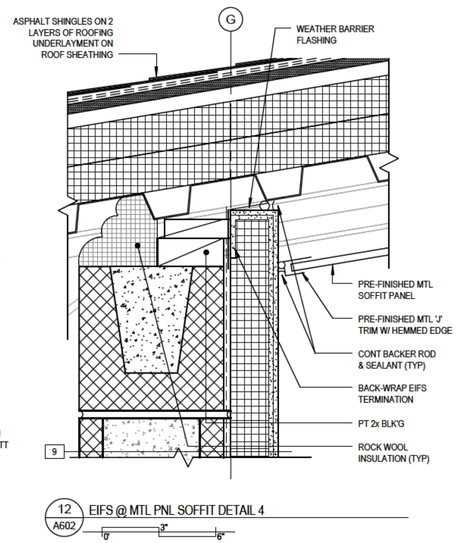


14 A602 EIFS @ MTL PNL SOFFIT DETAIL 6



13 A602 EIFS @ MTL PNL SOFFIT DETAIL 5



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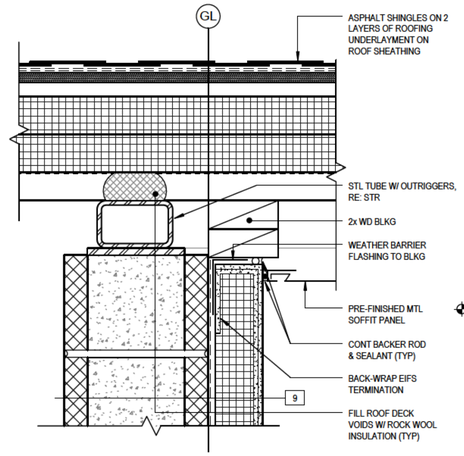

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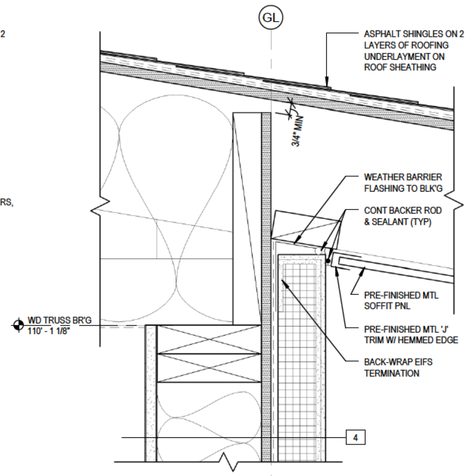
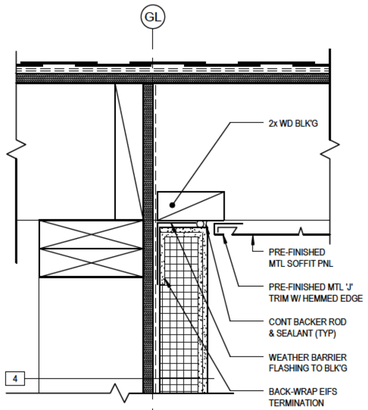
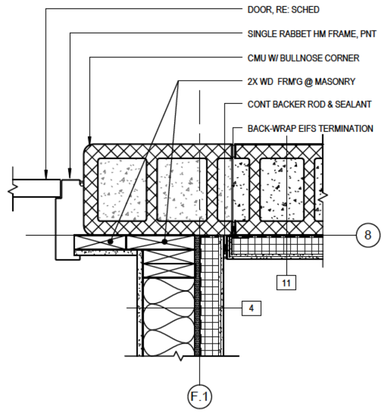


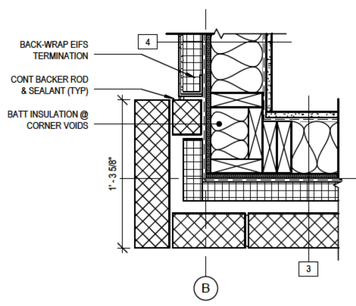
10 A602 EIFS @ MTL PNL SOFFIT DETAIL 2



9 A602 EIFS @ MTL PNL SOFFIT DETAIL



8 A602 PLAN DETAIL 4



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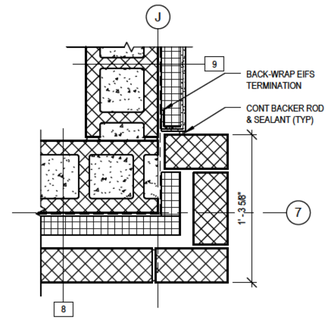

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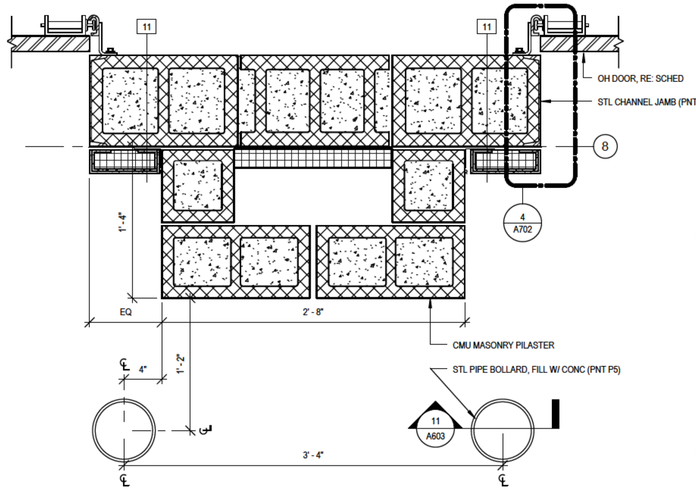
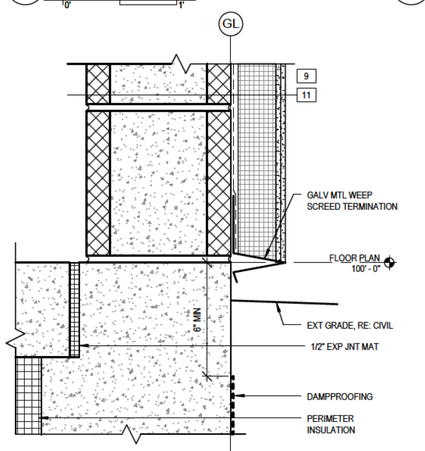
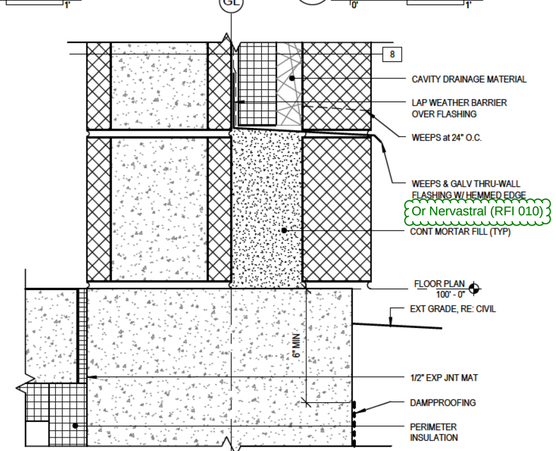


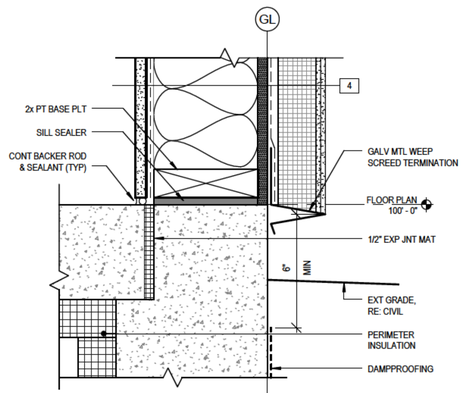
5 A602 PILASTER PLAN DETAIL



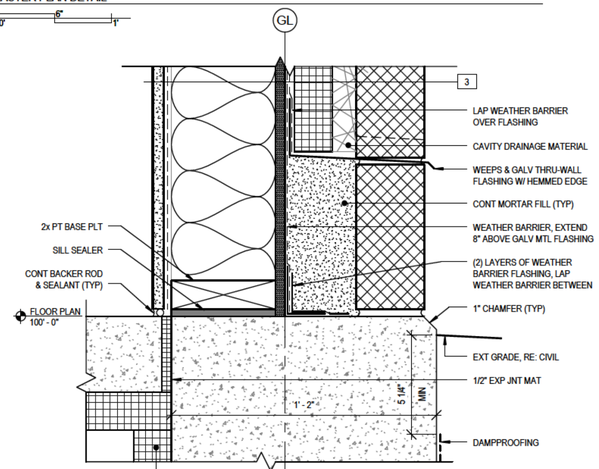
4 A602 BASE DTL @ WALL TYPE 9 & 11



3 A602 BASE DTL @ WALL TYP 8 & 10



2 A602 BASE DTL @ WALL TYPE 4



1 A602 BASE DTL @ WALL TYPE 3

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GRAND JUNCTION, COLORADO

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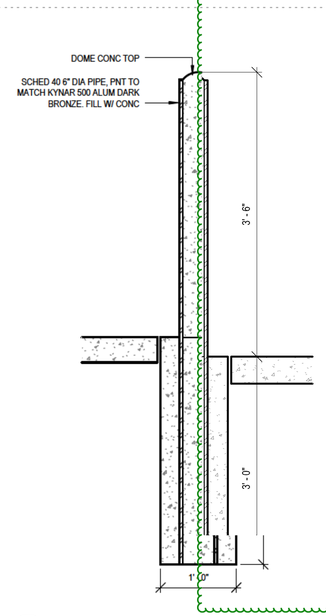
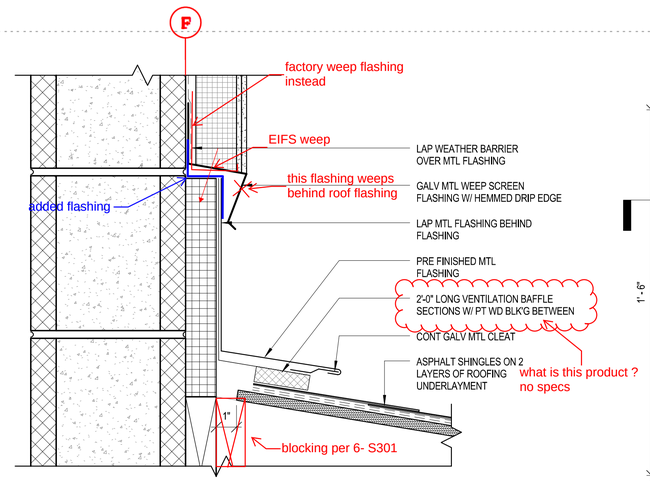
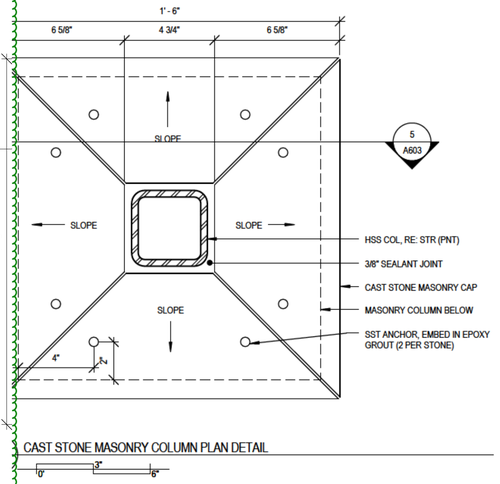


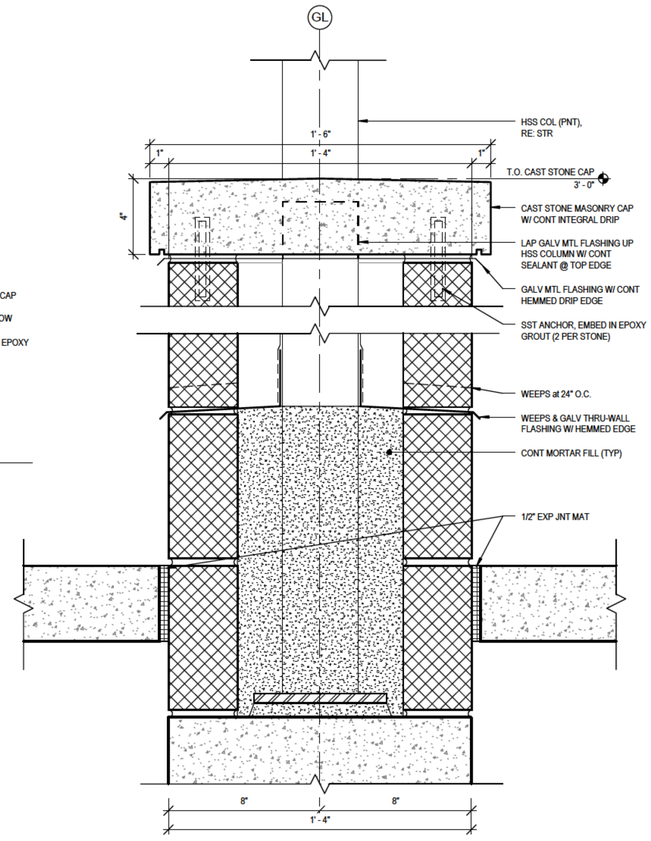


10 A603 EIFS COUNTERFLASHING DETAIL @ VENT

RFI 036

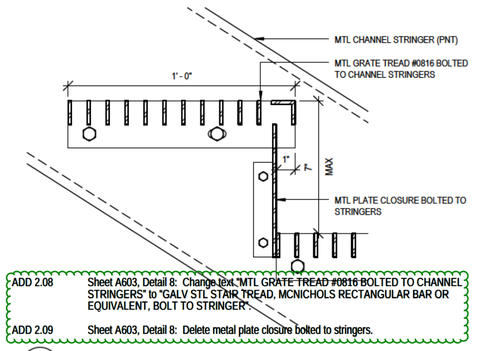


CAST STONE MASONRY COLUMN PLAN DETAIL



5 A603 CAST STONE MASONRY COLUMN DETAIL

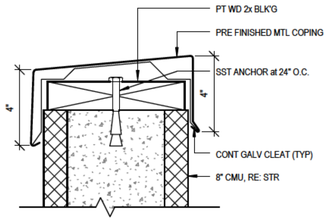
11 A603 STEEL BOLLARD DETAIL



ADD 2.08 Sheet A603, Detail 8: Change text "MTL GRATE TREAD #0816 BOLTED TO CHANNEL STRINGERS" to "GALV STL STAIR TREAD, MCNICHOLS RECTANGULAR BAR OR EQUIVALENT, BOLT TO STRINGER".

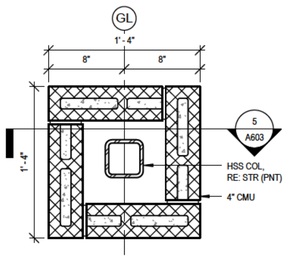
ADD 2.09 Sheet A603, Detail 8: Delete metal plate closure bolted to stringers.

8 A603 STAIR TREAD DETAIL

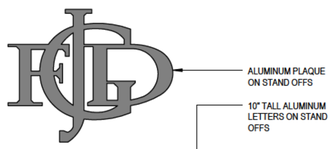


7 A603 COPING DETAIL

6 A603 HOIST DETAIL

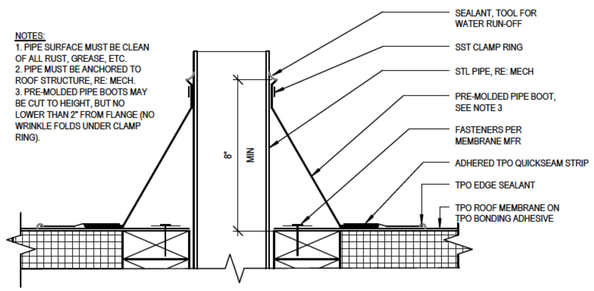


4 A603 MASONRY COLUMN PLAN DETAIL

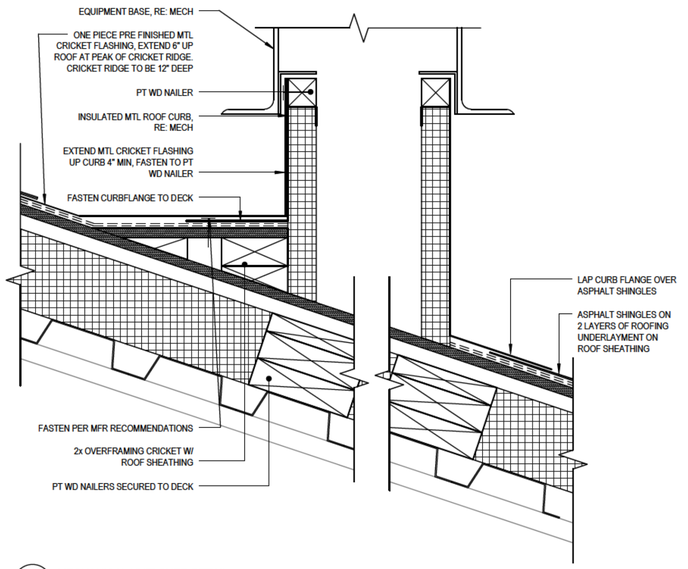


FIRE STATION #4

3 A603 GJFD LOGO



2 A603 TYP ROOF PENETRATION DETAIL



1 A603 MECHANICAL UNIT CURB DETAIL

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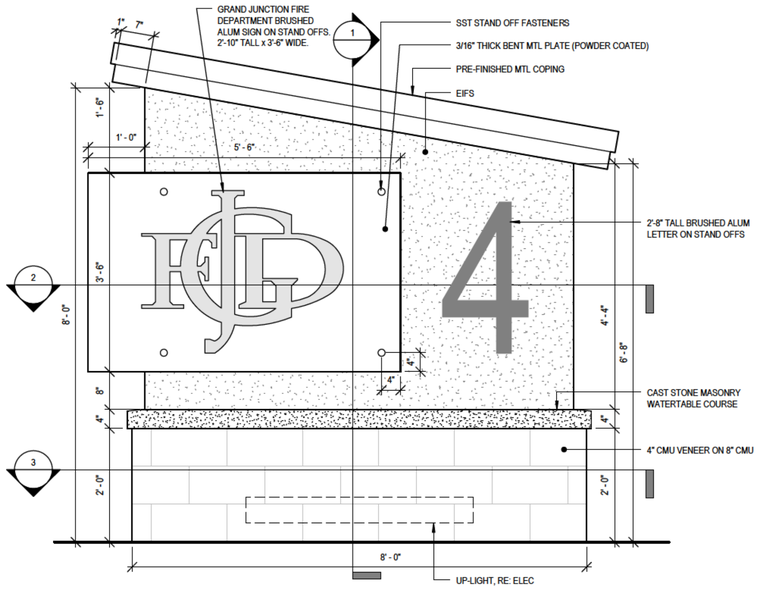
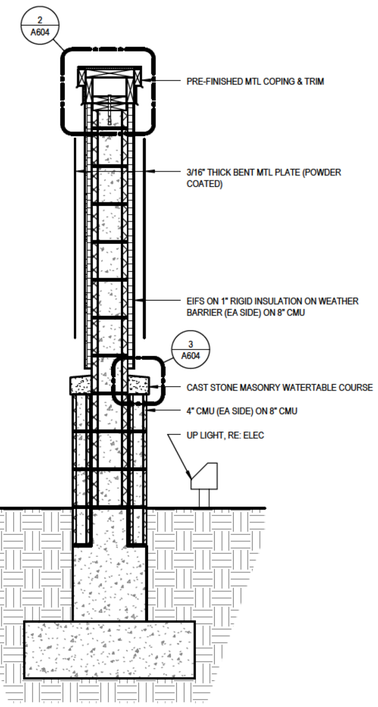
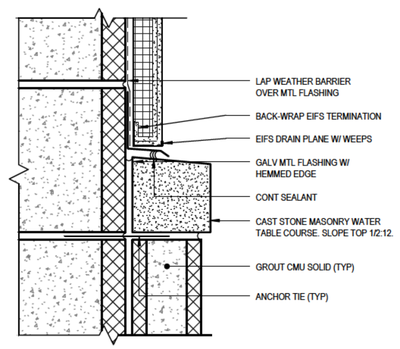
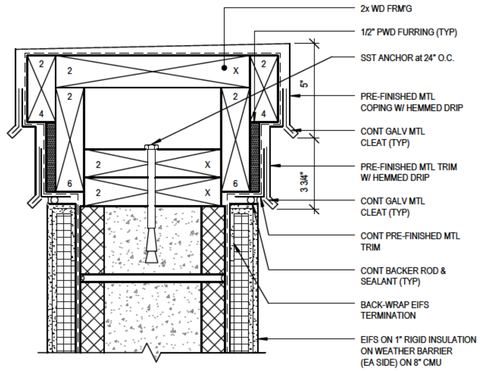


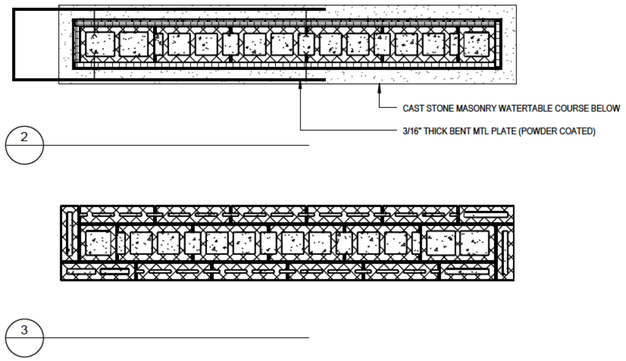




3 A604 MONUMENT SIGN WATER TABLE DETAIL



2 A604 MONUMENT SIGN COPING DETAIL



3 A604 MONUMENT SIGN

1 A604 MONUMENT SIGN

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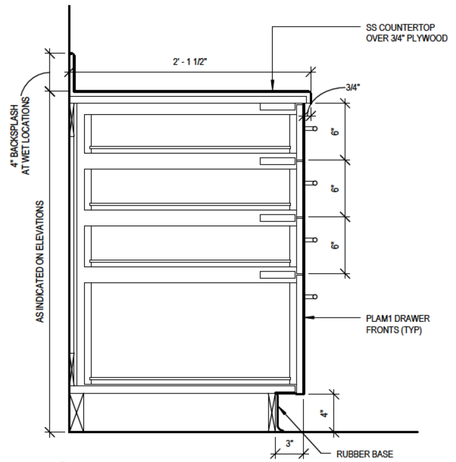
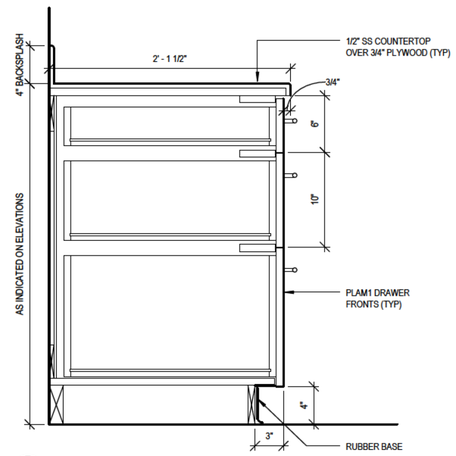


9 A621 MILLWORK STORAGE BASE WITH 4 DRAWERS



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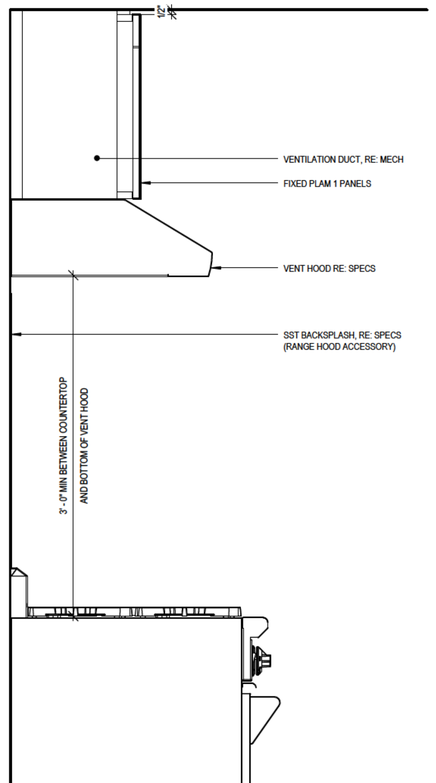
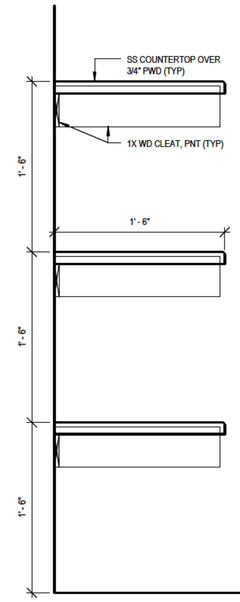
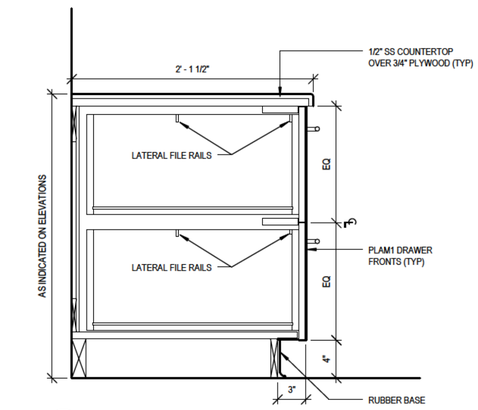


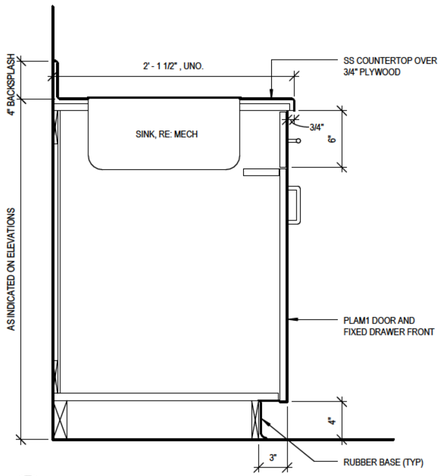
5 A621 MILLWORK SECTION AT RANGE



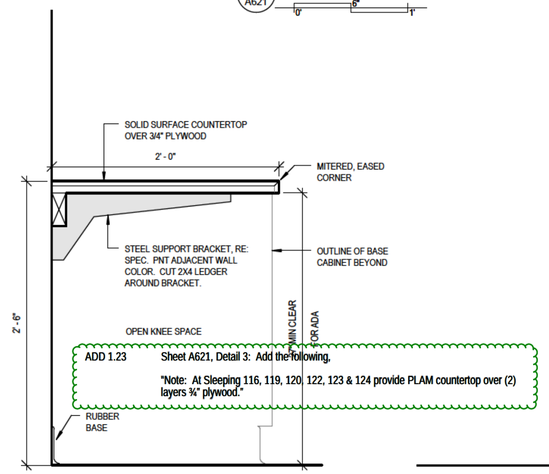
4 A621 MILLWORK COUNTER TOP SECTIONS



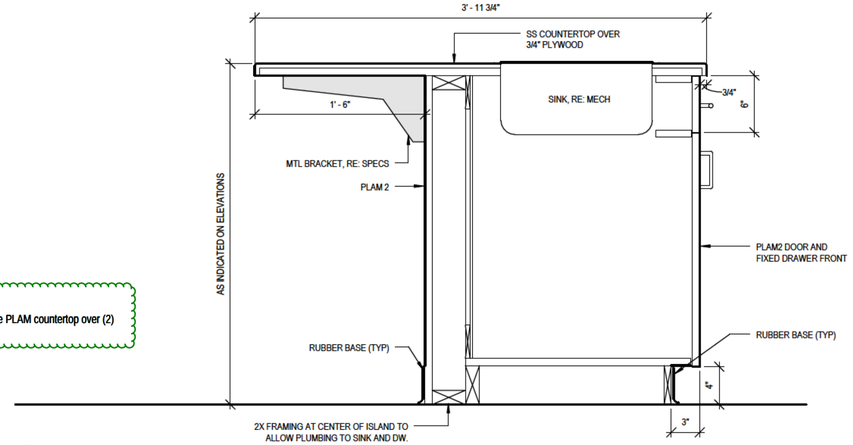
7 A621 MILLWORK STORAGE BASE WITH 2 DRAWERS



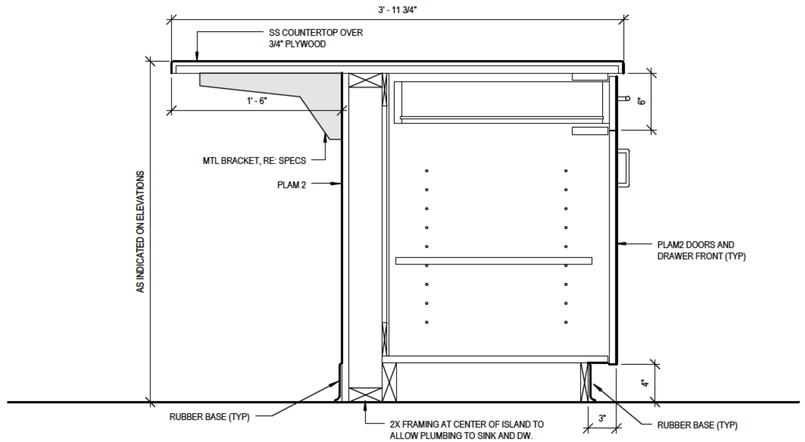
6 A621 MILLWORK SECTION AT SINK



3 A621 MILLWORK COUNTERTOP AT WORKSURFACE



2 A621 ISLAND MILLWORK SECTION AT SINK



1 A621 ISLAND MILLWORK SECITON AT RECYCLE CENTER

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

CASEWORK DETAILS

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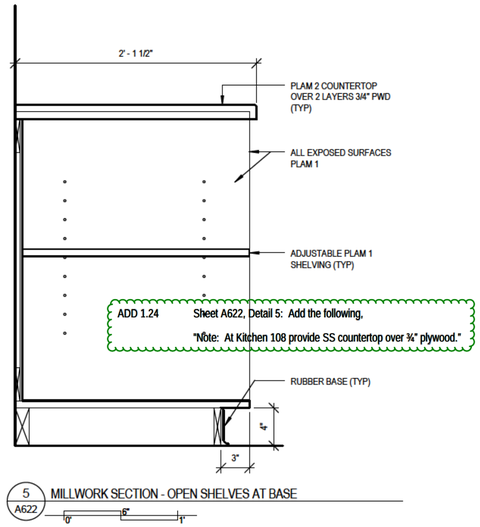
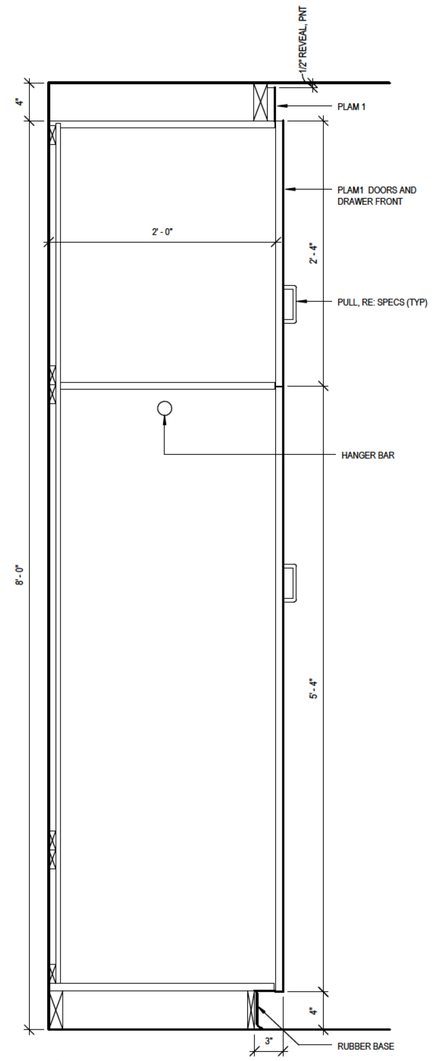
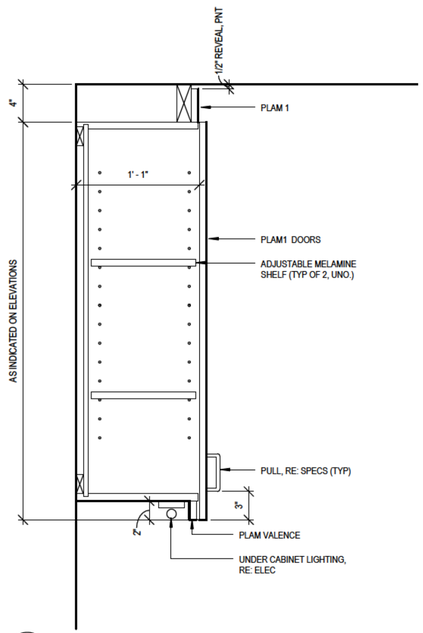


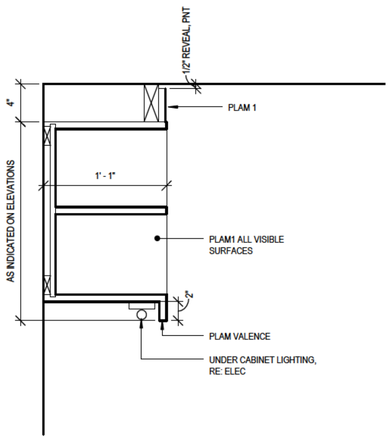
5 A622 MILLWORK SECTION - OPEN SHELVES AT BASE



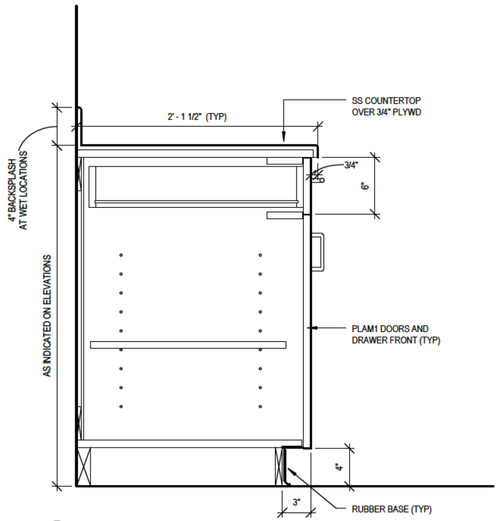
1 A622 MILLWORK STORAGE IN SLEEP ROOMS



4 A622 MILLWORK UPPER CABINET SECTION



3 A622 MILLWORK UPPER CABINET OPEN SECTION



2 A622 MILLWORK STORAGE WITH 1 DRAWER

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

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DATE: 04/10/2015 SHEET NO: A622

PROJECT NO: 1443

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PROPOSAL REQUEST

FIELD
OWNER
ARCHITECT
CONTRACTOR

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

PROPOSAL REQUEST NO: Two (2)

DATE: June 5, 2015

ARCHITECT'S PROJECT NO: 1443

CONTRACT DATED:

Please submit an itemized quotation for changes in the Contract Sum and/or Time incident to proposed modifications to the Contract Documents described herein.

THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

Description:

1. Specification Section 087100, Door Hardware, Hardware Group No. 01 (Door 101A), delete the following hardware:

1 EA	Surface Auto Operator	4642 WMS
1 EA	Weather Ring	8310-800
1 EA	Actuator, Wall Mount	8310-856T
2 EA	Flush Mount Box	8310-868F
1 EA	Escutcheon	8310-874

2. Specification Section 087100, Door Hardware, Hardware Group No. 01, add the following hardware:

1 EA	OH Stop	100S ADJ	US28	IV
1 EA	Surface Closure	4040XP EDA	689	LCN
1 EA	PA Mounting Plate	4040XP-18PA AS REQ'D	689	LCN

3. Specification Section 087100, Door Hardware: Add the following:
Hardware Group No. 18
For use on mark/door #(s):
135
EACH TO HAVE:

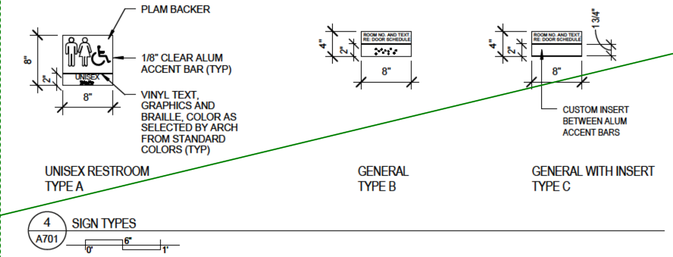
QTY	Description	Catalog Number		FIN	Mfr
6 EA	Hinges	3CB1 4.5 X 4.5 NRP		630	IV
2 EA	Manual Flush Bolt	FB458	626	IV	
1 EA	Dust Proof Strike	DP2		626	IV
1 EA	Deadbolt	82T-7-STK	626	BE	
1 EA	Construction Core	GREEN CONSTRUCTION CORE		BE	
1 EA	Astragal	178SA		AL	NGP
1 SET	Smoke Seal	S88 D 19'			PE
1 EA	Door Bottom Sweep	315 CN 60"			PE
1 EA	Threshold	270 A 60"			PE

4. Sheet A701, Door Schedule, Door No. 135: Add "18" in the HW SET column.

Attachments: none

ARCHITECT: Chamberlin Architects, P.C.
BY: Jonathan West

S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\PROPOSAL REQUESTS\PR#002.1443.doc

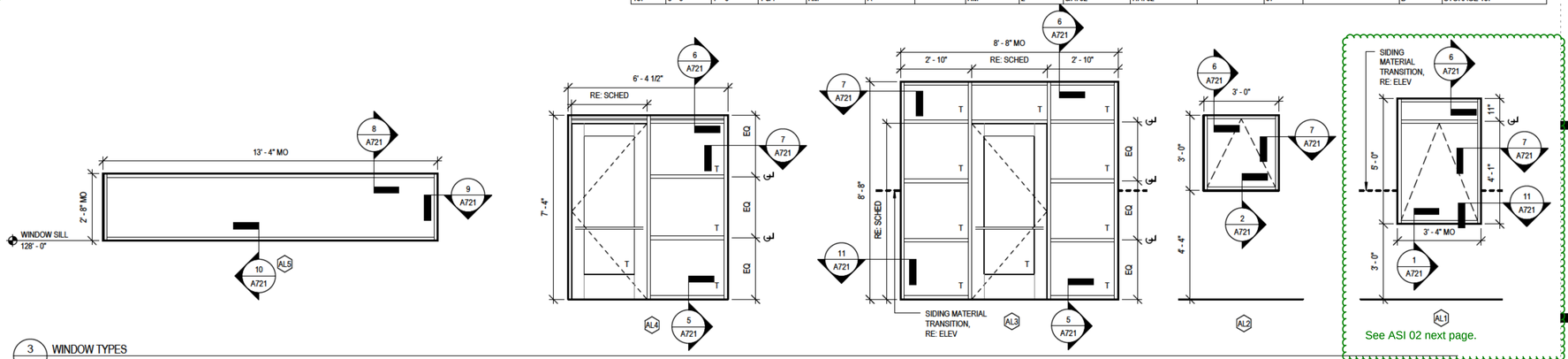


ADD 1.25 Sheet A701, Door Types: Add the following,

"General Note: Exterior door types C & F to receive 1-inch insulated glazing."

DOOR SCHEDULE

DOOR NO.	DOOR W	DOOR H	DOOR T	DOOR MATERIAL	DOOR TYPE	DOOR FIRE RATING	FRAME MATERIAL	FRAME TYPE	FRAME DETAIL JAMB	FRAME DETAIL HEAD	FRAME DETAIL SILL	HDWR SET	NOTES	SIGNAGE SIGN TYPE	SIGNAGE TEXT
101A	3' - 0"	7' - 0"	1 3/4"	AL	C		AL	AL3	RE: 3/A701	RE: 3/A701	18/A702	01			
102	3' - 0"	7' - 0"	1 3/4"	WD	C		HM	1	6/A702	5/A702	16/A702	08		C	CAPTAIN'S OFFICE 102
103A	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	-	08		C	OFFICE 103
103B	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	10/A702	9/A702	-	09		C	OFFICE 103
104	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	-	16		B	PANTRY 104
105	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	17/A702	13		A	
107	3' - 0"	7' - 0"	1 3/4"	AL	C		AL	AL4	RE: 3/A701	RE: 3/A701	19/A702	01.01			
109	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	-	03			
110	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	1	6/A702	5/A702	-	04			
111	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	1	6/A702	5/A702	-	10			
112A	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	16/A702	05			
112B	3' - 0"	7' - 0"	1 3/4"	HM	F		HM	1	2/A702	1/A702	15/A702	02			
112C	3' - 0"	7' - 0"	1 3/4"	HM	F		HM	1	2/A702	1/A702	15/A702	02			
113	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	14/A702	14		B	SHOWER & TOILET 113
114	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	14/A702	14		B	SHOWER & TOILET 114
115	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	14/A702	14		B	SHOWER & TOILET 115
116	3' - 0"	7' - 0"	1 3/4"	WD	A	20-MIN	HM	1	6/A702	5/A702	-	15			
119	3' - 0"	7' - 0"	1 3/4"	WD	A	20-MIN	HM	1	6/A702	5/A702	-	15			
120	3' - 0"	7' - 0"	1 3/4"	WD	A	20-MIN	HM	1	6/A702	5/A702	-	15			
121	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	1	6/A702	5/A702	16/A702	16		B	LAUNDRY 121
122	3' - 0"	7' - 0"	1 3/4"	WD	A	20-MIN	HM	1	6/A702	5/A702	-	15			
123	3' - 0"	7' - 0"	1 3/4"	WD	A	20-MIN	HM	1	6/A702	5/A702	-	15			
124	3' - 0"	7' - 0"	1 3/4"	WD	A	20-MIN	HM	1	6/A702	5/A702	-	15			
125A	3' - 0"	7' - 0"	1 3/4"	WD	A		HM	2	10/A702	9/A702	16/A702	03			
125B	3' - 0"	7' - 0"	1 3/4"	HM	F		HM	2	12/A702	11/A702	15/A702	02			
126	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	8/A702	7/A702	-	12		B	MECHANICAL ROOM 126
127A	14' - 0"	14' - 0"	2"	STL	D		STL	-	4/A702	3/A702	-	17			
127B	14' - 0"	14' - 0"	2"	STL	D		STL	-	4/A702	3/A702	-	17			
128A	14' - 0"	14' - 0"	2"	STL	D		STL	-	4/A702	3/A702	-	17			
128B	14' - 0"	14' - 0"	2"	STL	D		STL	-	4/A702	3/A702	-	17			
129A	14' - 0"	14' - 0"	2"	STL	D		STL	-	4/A702	3/A702	-	17			
129B	14' - 0"	14' - 0"	2"	STL	D		STL	-	4/A702	3/A702	-	17			
130	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	8/A702	7/A702	-	03		B	SCBA REPAIR 130
131	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	8/A702	7/A702	-	11		B	ELECTRICAL ROOM
132A	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	8/A702	7/A702	13/A702	06		B	FITNESS 132
132B	12' - 0"	8' - 0"	2"	STL	E		STL	-	4/A702 SIM	3/A702 SIM		17			
135	5' - 0"	7' - 0"	1 3/4"	HM	B		HM	2	12/A702	11/A702	20/A702				
136A	3' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	12/A702	11/A702	15/A702	02.01			
136B	8' - 0"	8' - 0"	2"	STL	E		STL	-	4/A702	3/A702	-	17			
137	6' - 0"	7' - 0"	1 3/4"	HM	A		HM	2	8/A702	7/A702	-	07		B	STORAGE 137



See ASI 02 next page.

PROPOSAL REQUEST

FIELD
OWNER
ARCHITECT
CONTRACTOR

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

PROPOSAL REQUEST NO: Six (6)

DATE: July 16, 2016

ARCHITECT'S PROJECT NO: 1443

CONTRACT DATED: December 18, 2014

Please submit an itemized quotation for changes in the Contract Sum and/or Time incident to proposed modifications to the Contract Documents described herein.

THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

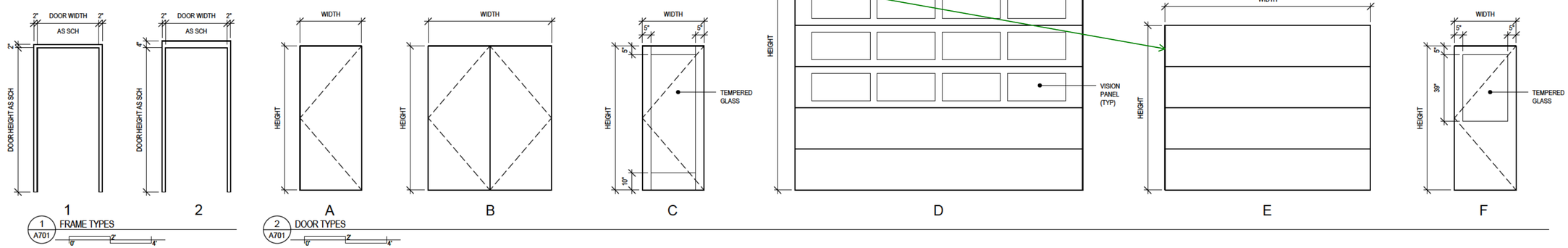
Description:

1. Change Door 133B from "Electric Door Operator" to "Manual Chain Operation".
2. Change Door 136B from "Electric Door Operator" to "Manual Chain Operation".
3. ~~Provide shop-applied (sprayed)~~ urethane finish at doors 127A, 127B, 128A, 128B, 129A and 129B (exterior face only). Color to match ~~Sherwin Williams SW 7593 Rustic Red~~. Contractor's option to provide either single stage (color & clearcoat mixed together) or 2-stage (color & ~~clearcoat~~ separate) ~~finish~~
Manufacturer's Tan

Attachments: none

ARCHITECT: Chamberlin Architects, P.C.
BY: Jonathan West

S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\PROPOSAL REQUESTS\PR#006.1443.doc



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T 970.242.6804

725 Saint Joseph St., Suite B1
Rapid City, South Dakota 57701
T 605.355.6804

www.chamberlinarchitects.com

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

DOOR SCHEDULE, FRAME, DOOR, WINDOW & SIGN TYPES

NO: ISSUED FOR: DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A701

PROJECT NO: 1443

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ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

OWNER
ARCHITECT
CONTRACTOR
FIELD
OTHER

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

ARCHITECT'S SUPPLEMENTAL INSTRUCTION NO: Two (2)

ARCHITECT: Chamberlin Architects
437 Main Street
Grand Junction, CO 81501

ARCHITECT'S PROJECT NO: 1443

DATE OF ISSUANCE: July 13, 2015

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

Add FLOOR PLAN – CASEMENT SWING as illustrated in the attached Sketch ASK-5 dated 7/13/15. This sketch is issued as a supplement to our response to RFI#011.

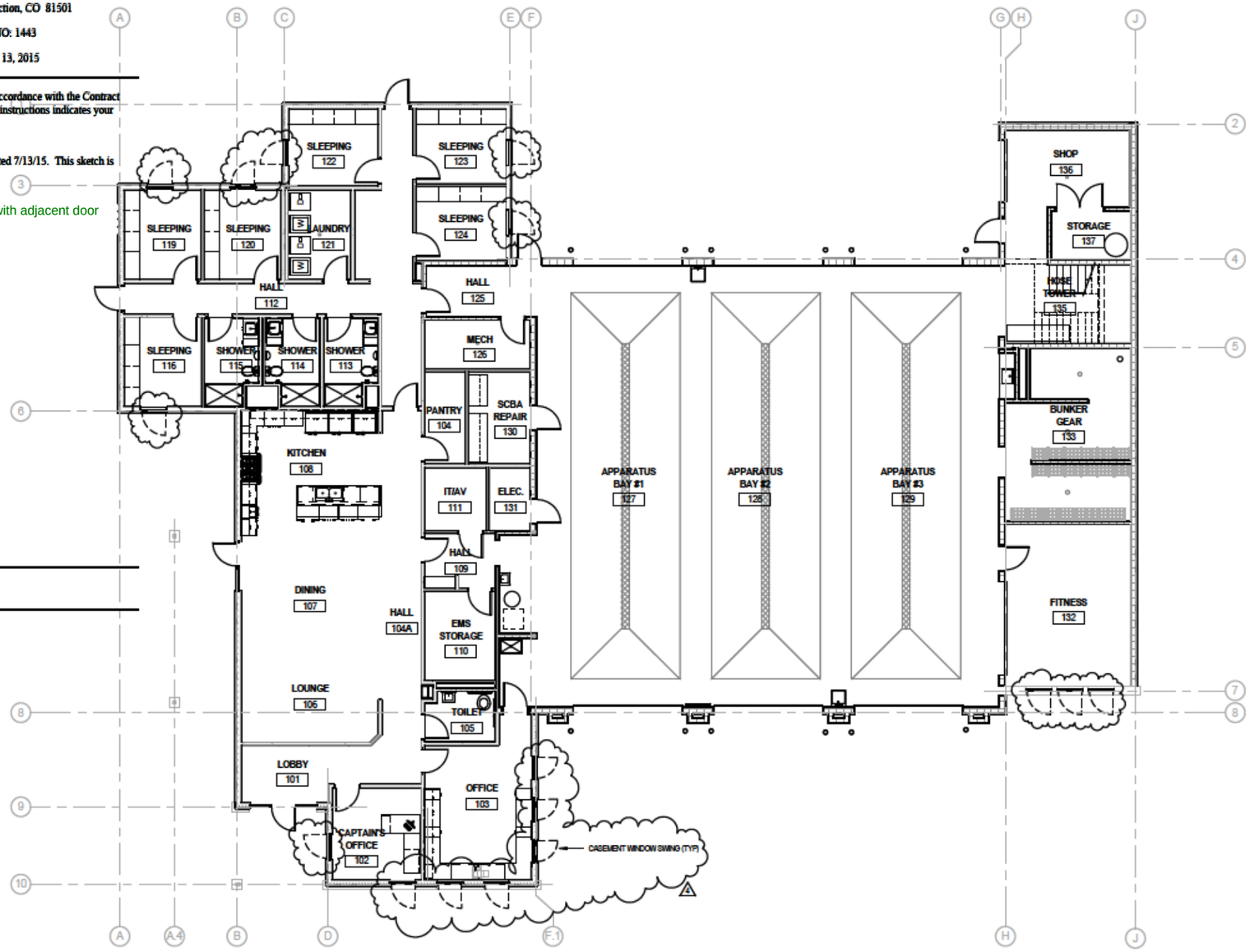
Add "limiting block" to keep window at Sleeping 124 from interfering with adjacent door swing and egress route.

Attachments: ASK-5

ARCHITECT: Chamberlin Architects, P.C.

BY: Jonathan West

S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\ASI\ASI#002.1443.doc



1 ASK-5 FLOOR PLAN - CASEMENT SWING

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FLOOR PLAN - CASEMENT SWING

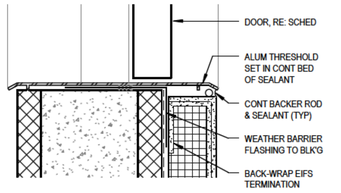
NO:	ISSUED FOR:	DATE:
1	ASI#002	7/13/15

PROJECT STATUS: 100% CDs

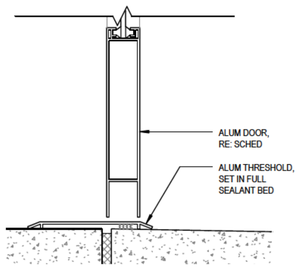
DRAWN BY: JW CHECKED BY: Checker

DATE: 05/27/2015 SHEET NO:

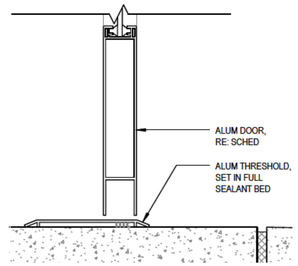
PROJECT NO: 1443 **ASK-5**



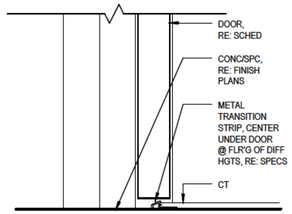
20 A702 DOOR THRESHOLD @ STAIR TOWER



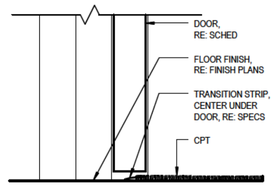
19 A702 THRESHOLD @ STOREFRONT B



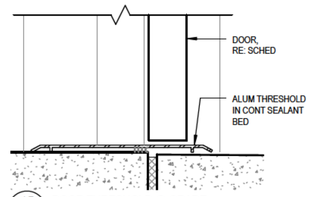
18 A702 THRESHOLD @ STOREFRONT A



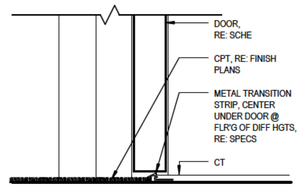
17 A702 THRESHOLD @ CT TO CONC/SPC



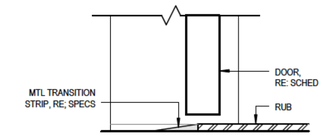
16 A702 THRESHOLD AT CPT TO CONC/SPC



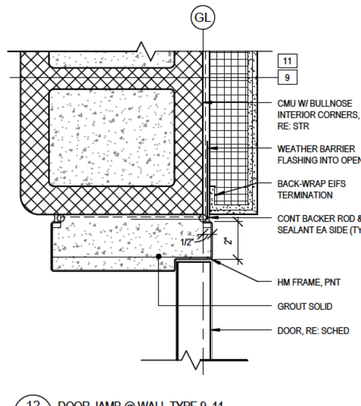
15 A702 DOOR THRESHOLD @ GRADE



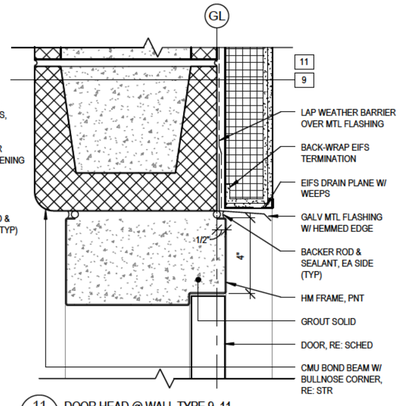
14 A702 THRESHOLD @ CT TO CPT



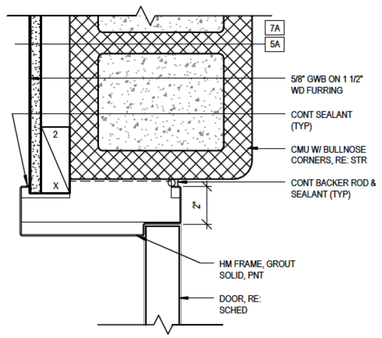
13 A702 THRESHOLD @ CONC TO RUB



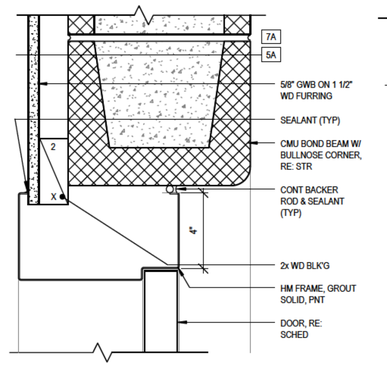
12 A702 DOOR JAMB @ WALL TYPE 9, 11



11 A702 DOOR HEAD @ WALL TYPE 9, 11



10 A702 DOOR JAMB @ WALL TYPE 5A & 7A



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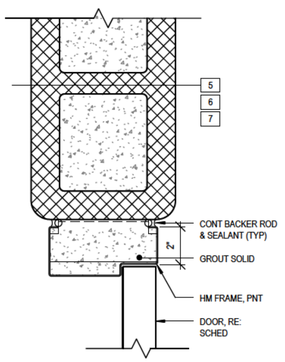
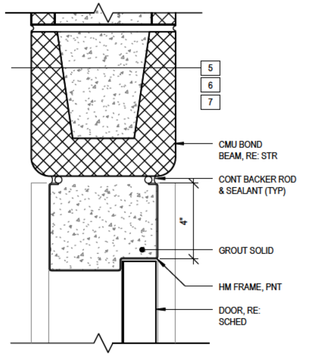


8 A702 INT DOOR JAMB @ CMU



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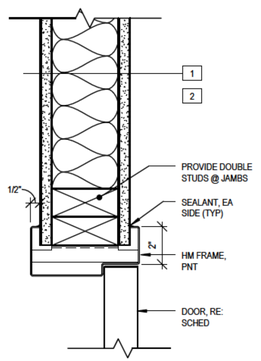
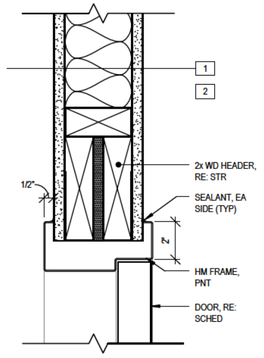
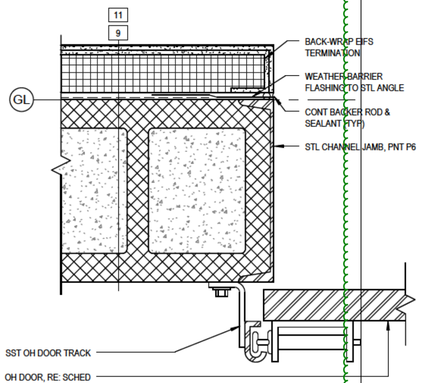


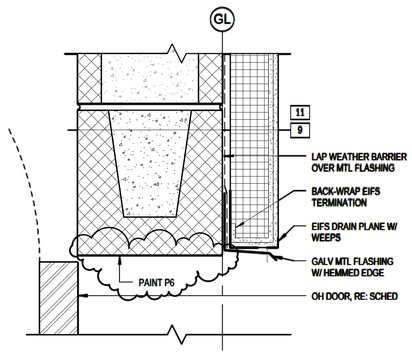
6 A702 INT DOOR JAMB @ WD STUDS



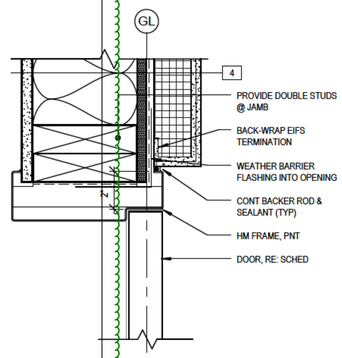
5 A702 INT DOOR HEAD @ WD STUDS



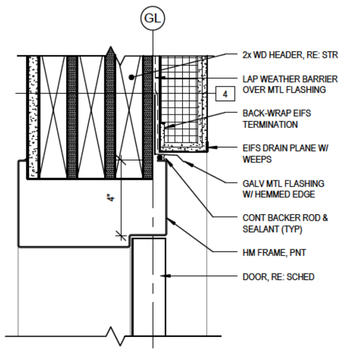
4 A702 OH DOOR JAMB DETAIL



3 A702 OH DOOR HEAD @ EIFS



2 A702 HM DOOR JAMB @ WALL TYPE 4



1 A702 HM DOOR HEAD @ WALL TYPE 4

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

DOOR DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: Author CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **A702**

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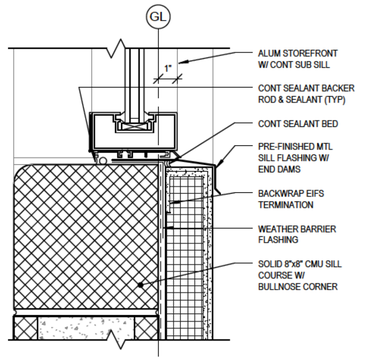
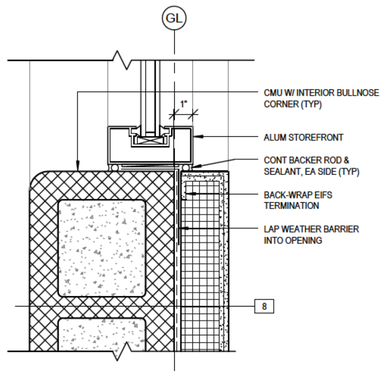
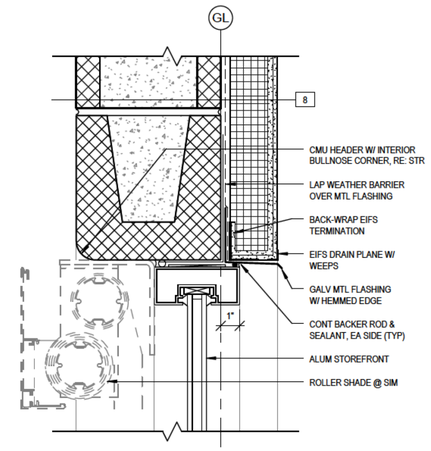


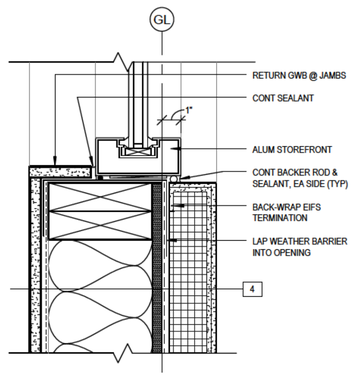
10 A721 WINDOW SILL DTL @ WALL TYPE 9



9 A721 WINDOW JAMB DTL @ WALL TYPE 9



8 A721 WINDOW HEAD DTL @ WALL TYPE 9



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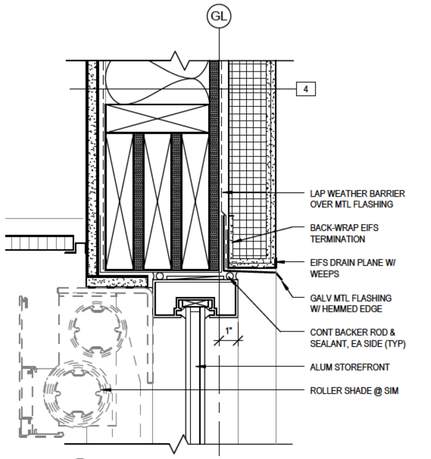
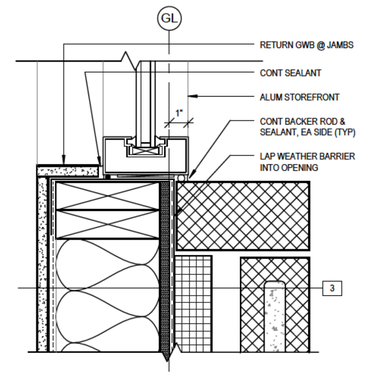
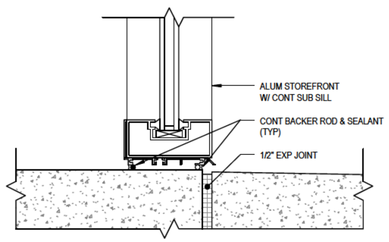


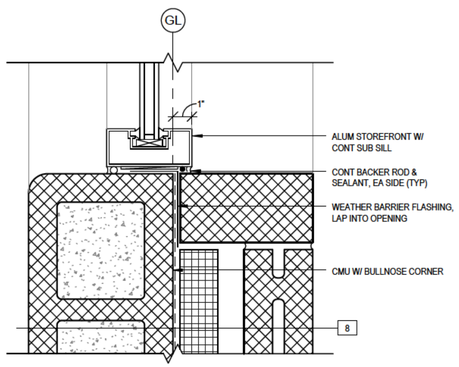
6 A721 WINDOW HEAD DTL @ WALL TYPE 4



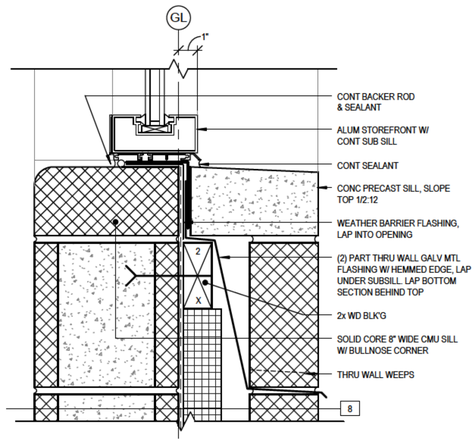
11 A721 WINDOW JAMB DETAIL @ WALL TYPE 3



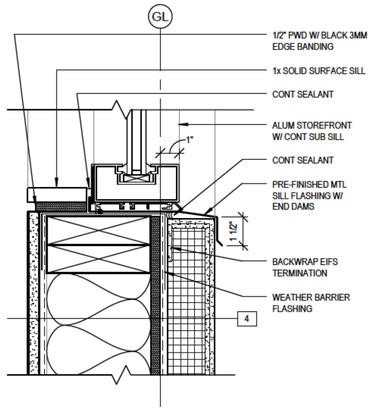
5 A721 STOREFRONT SILL DETAIL @ GRADE



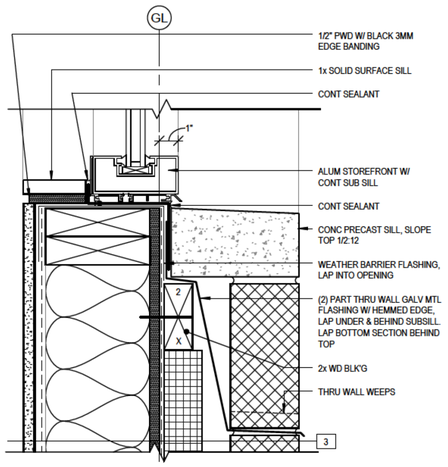
4 A721 WINDOW JAMB DTL @ WALL TYPE 10



3 A721 WINDOW SILL DTL @ WALL TYPE 8



2 A721 WINDOW SILL DTL @ WALL TYPE 4



1 A721 WINDOW SILL DTL @ WALL TYPE 3

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

WINDOW DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A721

PROJECT NO: 1443

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COLOR REVIEW AND APPROVAL: THE COLOR SCHEDULES IN THE DRAWINGS INDICATE THE INITIAL COLOR SELECTIONS FOR THE PROJECT. BECAUSE OF THE POTENTIAL FOR PRODUCT SUBSTITUTIONS AND DISCONTINUATION OF COLORS, FINAL COLOR SELECTIONS WILL BE MADE BY THE ARCHITECT ONLY AFTER ALL COLOR SUBMITTALS HAVE BEEN RECEIVED FROM THE CONTRACTOR. SEE DIVISION 01 SPECIFICATIONS SECTION "SUBMITTAL PROCEDURES".

INTERIOR COLOR SCHEDULE

SPECIFICATION SECTION		ITEM	COLOR
NUMBER	TITLE		
03 3543	POLISHED CONCRETE FINISHING	SPC	RETROPLATE, AMERIPOLISH COLOR WALNUT
06 4023	INTERIOR ARCHITECTURAL MILLOWRK	PLAM 1	WILSON ART, HARVEST MAPLE 7953-38
06 4023	INTERIOR ARCHITECTURAL MILLOWRK	PLAM 2	WILSON ART, WAREHOUSE OAK 7969-12
08 1113	HOLLOW METAL DOORS AND FRAMES	P4	SW7026 GRIFFIN
08 1416	FLUSH WOOD DOORS		PLAIN SLICED CHERRY, MATCH ARCH SAMPLE
09 3000	TILING	CT1 - FLOOR TILE	DALTILE PLAZA NOVA BROWN VISION PN96
09 3000	TILING	CT2 - WALL TILE	DALTILE PLAZA NOVA WHITE IMAGE PN94
09 3000	TILING	CT3 - ACCENT TILE	DALTILE COLOR WAVE BLOCK, AUTUMN TRAIL
09 3000	TILING	WALL GROUT	MAPEI 14 BISCUIT
09 3000	TILING	FLOOR GROUT	MAPEI 09 GRAY
09 5113	ACOUSTICAL PANEL CEILINGS	GRID & TILE	WHITE
09 6513	RESILIENT BASE AND ACCESSORIES	RUBBER BASE	ROPPE 194 BURNT UMBER
09 6816	SHEET CARPETING	CPT	MANNINGTON SOCIAL, COLOR LINKED
09 9000	PAINTING	P-1 - WALL COLOR	SW7045 WORDLY GRAY
09 9000	PAINTING	P-2 - CEILING COLOR	SW7042 SHOJI WHITE
09 9000	PAINTING	P-3 - ACCENT COLOR	SW0014 SHERATON SAGE
09 9000	PAINTING	P-4 - DOOR FRAMES	SW7026 GRIFFIN
09 9000	PAINTING	P-5 - STEEL BOLLARDS	SW6991 BLACK MAGIC
09 9000	PAINTING	P-6 - STEEL CHANNEL JAMBS	SW6106 KILIM BEIGE
10 1400	SIGNAGE	TEXT	TO BE SELECTED FROM MANUFACTURER'S STANDARD COLORS
10 1400	SIGNAGE	BACKGROUND	WILSON ART HARVEST MAPLE 7953-58
10 1400	SIGNAGE	ACCENT BAR	ANNODIZED ALUMINUM
10 2600	WALL & DOOR PROTECTION	CORNER GUARDS	SST
12 2413	ROLLER WINDOW SHADES	LIGHT FILTERING	TO BE SELECTED FROM MANUFACTURER'S STANDARD COLORS
12 2413	ROLLER WINDOW SHADES	BLACKOUT	TO BE SELECTED FROM MANUFACTURER'S STANDARD COLORS
12 3661	STONE COUNTERTOPS	SOLID SURFACE - SS	CORAIN COTTAGE LANE

EXTERIOR COLOR SCHEDULE

SPECIFICATION SECTION		ITEM	COLOR
NUMBER	TITLE		
03 3000	CAST IN PLACE CONCRETE	SITE CONCRETE	GRAY
04 2200	CONCRETE UNIT MASONRY	CMU-A	B
04 2200	CONCRETE UNIT MASONRY	MORTAR	INTEGRAL COLOR, TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS
04 7200	CAST STONE MASONRY	SILLS & CAPS	TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS
05 5000	METAL FABRICATIONS	STEEL HANDRAILS	TBD
07 2413	EXTERIOR INSULATION AND FINISH SYSTEMS	EIFS, COLOR-1	DRYVIT #103 NATURAL WHITE
07 3113	ASPHALT SHINGLES	SHINGLES	TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS
07 4213.53	METAL SOFFIT PANELS	METAL SOFFIT PANEL	ALUMINUM DARK BRONZE
07 6200	SHEET METAL FLASHING AND TRIM	FASCIA A	ALUMINUM DARK BRONZE
07 6200	SHEET METAL FLASHING AND TRIM	FASCIA B	COLONIAL RED
07 9200	JOINT SEALERS	CMU CONTROL JOINT	MATCH MORTAR
07 9200	JOINT SEALERS	STOREFRONT TO EIFS JOINTS	MATCH STORERONT
07 9200	JOINT SEALERS	METAL PANEL TO EIFS JOINTS	MATCH METAL PANELS
07 9200	JOINT SEALERS	CMU TO METAL PANEL JOINTS	MATCH MORTAR
08 1113	HOLLOW METAL DOORS AND FRAMES	DOORS	MATCH ALUMINUM STOREFRONT FRAMING
08 1113	HOLLOW METAL DOORS AND FRAMES	FRAMES	MATCH ALUMINUM STOREFRONT FRAMING
08 3613	SECTIONAL DOORS	DOORS	RAL 3001
08 4113	ALUMINUM FRAMED ENTRANCES AND STOREFRONTS	STOREFRONT FRAMING	DARK BRONZE ANNODIZED
08 7100	DOOR HARDWARE	DOOR HARDWARE	SEE SPECIFICATION SECTION 08 7100
08 8000	GLAZING	GLASS TYPE 1	SEE SPECIFICATION SECTION 08 8000
09 9600	HIGH PERFORMANCE COATINGS	EXTERIOR STEEL	MATCH ALUMINUM STOREFRONT FRAMING
10 1400	SIGNAGE	EXTERIOR CAST ALUMINUM LETTERS	DARK BRONZE ANNODIZED
10 7500	FLAGPOLES	FLAGPOLE	DARK BRONZE ANNODIZED

ADD 1.26 — Sheet A741, Exterior Color Schedule, 04 2200 Concrete Unit Masonry, CMU-A: Change color to read, "Buehner Block, Color Parchment (Ground-Face) or approved equal by Brickyard".

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

OWNER
ARCHITECT
CONTRACTOR
FIELD
OTHER

PROJECT: Orchard Mesa Fire Station #4
OWNER: City of Grand Junction
TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

ARCHITECT'S SUPPLEMENTAL INSTRUCTION NO: One (1)
ARCHITECT: Chamberlin Architects
437 Main Street
Grand Junction, CO 81501
ARCHITECT'S PROJECT NO: 1443
DATE OF ISSUANCE: June 5, 2015

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

Sheet A161, Interior Finish Plan: where "sealed concrete" is called out, provide Ashford Formula by Concrete Distribution, Inc. or approved equal. Comply with manufacturer's installation procedure.

Attachments: none

ARCHITECT: Chamberlin Architects, P.C.
BY: Jonathan West
S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\ASI\ASI001.1443.doc

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

OWNER
ARCHITECT
CONTRACTOR
FIELD
OTHER

PROJECT: Orchard Mesa Fire Station #4
OWNER: City of Grand Junction
TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

ARCHITECT'S SUPPLEMENTAL INSTRUCTION NO: Eight (8)
ARCHITECT: Chamberlin Architects
437 Main Street
Grand Junction, CO 81501
ARCHITECT'S PROJECT NO: 1443
DATE OF ISSUANCE: October 12, 2015

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

1. Sheet A161, Finish Plan: Change accent color designation in Sleeping room finish tag from 'P2' to 'P5'.
2. Detail 3/A702, change per attached sketch ASK15.
3. Sheet A741, Interior color schedule:
   a. Change P5 Steel Bollards to ~~Rustic Red SW7593~~
   b. Change P6 Steel Channel Jambs to ~~Rustic Red SW7593~~ → SW6991 Black Magic

Attachments: ASK 15

ARCHITECT: Chamberlin Architects, P.C.
BY: Casey Sawila
S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\ASI\ASI008.1441.doc

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

COLOR SCHEDULE

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO: A741

PROJECT NO: 1443

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ABBREVIATIONS

A.B.	-ANCHOR BOLT	F.O.B.	-FACE OF BRICK	P.T.	-PRESSURE TREATED
ADD'L	-ADDITIONAL	F.O. CONC.	-FACE OF CONCRETE	R.	-RADIUS
ADJ.	-ADJACENT	F.O.W.	-FACE OF WALL	REINF.	-REINFORCEMENT
A.I.S.C.	-AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FS.	-FLAT SLAB	REQ'D	-REQUIRED
		FT.	-FOOT	RM.	-ROOM
ALT.	-ALTERNATE	FTG.	-FOOTING	SCHED.	-SCHEDULE
ARCH.	-ARCHITECTURAL	F.W.	-FILLET WELD	SECT.	-SECTION
A.S.T.M.	-AMERICAN SOCIETY FOR TESTING & MATERIALS	GA.	-GAUGE	SHT.	-SHEET
		GAL.	-GALVANIZED	s.d.l.	-SUPERIMPOSED DEAD LOAD
BLDG.	-BUILDING	G.L.	-BLU-LAM BEAM	SIM.	-SIMILAR
BM.	-BEAM	GR.	-GRADE	s.l.	-SNOW LOAD
B.O.	-BOTTOM OF	GR. BM.	-GRADE BEAM	S.L.V.	-SHORT LEG VERTICAL
BOT.	-BOTTOM	H.A.S.	-HEADED ANCHOR STUD	SPC.	-SPACE
BSMT.	-BASEMENT	H.D.G.	-HOT DIPPED GALVANIZED	SPEC.	-SPECIFICATION
BTWN.	-BETWEEN	HORIZ.	-HORIZONTAL	SQ.	-SQUARE
CANT.	-CANTILEVER	H.S.B.	-HIGH STRENGTH BOLT	STD.	-STANDARD
CB.	-CARDBOARD	HSS	-HOLLOW STRUCTURAL SECTION	STIFF.	-STIFFENER
CH.	-CHAMFER	I.D.	-INSIDE DIAMETER	STL.	-STEEL
C.J.	-CONTROL/CONSTRUCTION JOINT	I.F.	-INSIDE FACE	STOR.	-STORAGE
CJP	-COMPLETE JOINT PENETRATION	IN.	-INCH	SYM.	-SYMMETRICAL
CLR.	-CLEAR, CLEARANCE	INT.	-INTERIOR	T.&B.	-TOP & BOTTOM
C.M.U.	-CONCRETE MASONRY UNIT	JNT.	-JOINT	THK.	-THICKNESS
COL.	-COLUMN	K	-KIP (1,000 lbs.)	T.O.	-TOP OF
CONC.	-CONCRETE	K.C.I.	-KIP PER CUBIC INCH	TYP.	-TYPICAL
CONN.	-CONNECTION	LB.	-POUND	U.N.O.	-UNLESS NOTED OTHERWISE
CONST.	-CONSTRUCTION	LIN. FT.	-LINEAL FEET	VAR.	-VARIES
CONT.	-CONTINUOUS	L.L.	-LIVE LOAD	VERT.	-VERTICAL
CONTR.	-CONTRACTOR	L.L.V.	-LONG LEG VERTICAL	V.I.F.	-VERIFY IN FIELD
CTRD.	-CENTERED	L.S.L.	-LAMINATED STRAND LUMBER	WT.	-WEIGHT
C.W.	-CURTAIN WALL	L.V.L.	-LAMINATED VENEER LUMBER	SYMBOLS	
DET.	-DETAIL	MAT'L.	-MATERIAL	Ç	CENTER LINE
DIAG.	-DIAGONAL	MAX.	-MAXIMUM	ø	DIAMETER
DIAM.	-DIAMETER	MECH.	-MECHANICAL		ELEVATION
DIM.	-DIMENSION	MID.	-MIDDLE	&	AND
DISCONT.	-DISCONTINUOUS	MIN.	-MINIMUM	W/	WITH
d.l.	-DEAD LOAD	MISC.	-MISCELLANEOUS	PL	PLATE
DWG.	-DRAWING	MTL.	-METAL	X	BY
EA.	-EACH	N.I.C.	-NOT IN CONTRACT	#	NUMBER
E.F.	-EACH FACE	NO.	-NUMBER	@	AT
EL.	-ELEVATION	NOM.	-NOMINAL	□	SQUARE
ELECT.	-ELECTRICAL	N.T.S.	-NOT TO SCALE	L	ANGLE
ELEV.	-ELEVATOR	O.C.	-ON CENTER	X	FOOTING TYPE
EQ.	-EQUAL	O.F.	-OUTSIDE FACE	P-X	PILASTER TYPE
E.W.B.	-END WALL BARS	O.D.	-OUTSIDE DIAMETER		
E.W.	-EACH WAY	O.H.	-OPPOSITE HAND		
EXIST.	-EXISTING	OPNG.	-OPENING		
EXP. JNT.	-EXPANSION JOINT	P.A.F.	-POWDER ACTUATED FASTENERS		
EXT.	-EXTERIOR	PL.	-PLATE		
FDN.	-FOUNDATION	P.S.F.	-POUND PER SQUARE FOOT		
FIN.	-FINISH	P.S.I.	-POUND PER SQUARE INCH		
FLR.	-FLOOR	P.S.L.	-PARALLEL STRAND LUMBER		

GENERAL NOTES CONT.

3. STEEL:
   A. ALL STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992 (Fy = 50 ksi).
   B. ALL STRUCTURAL STEEL ANGLES, CHANNELS, S SHAPES, AND PLATES SHALL CONFORM TO ASTM 36 (FY = 36 ksi)
   C. ALL RECTANGULAR OR SQUARE HSS (HOLLOW STRUCTURAL SECTIONS) MEMBERS SHALL CONFORM TO ASTM A500 (GRADE B). ALL ROUND HSS MEMBERS SHALL CONFORM TO ASTM A53 (GRADE B) OR A500 (GRADE B), LATEST EDITIONS.
   D. STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH LATEST PROVISION OF THE A.I.S.C. STEEL CONSTRUCTION MANUAL.
   E. USE FRAMED BEAM CONNECTIONS WITH 3/4" DIAMETER ASTM A325 BOLTS, OR WELDED EQUIVALENT, UNLESS OTHERWISE SHOWN OR NOTED, (2) BOLT MIN. STEEL FABRICATOR SHALL PROVIDE SHOP DRAWINGS WITH DETAILED CONNECTIONS THAT HAVE BEEN DESIGNED IN ACCORDANCE WITH CHAPTER 10 OF THE AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION. FOR BEAMS WITHOUT DESIGNATED LOADS ON DRAWINGS, USE 8k MINIMUM EACH END. IF TWO SYMBOLS ARE SHOWN, THEY DENOTE CONNECTION REQUIRED AT CORRESPONDING END. IF ONLY ONE SYMBOL IS SHOWN, IT DENOTES CONNECTION REQUIRED AT EACH END OF BEAM.
   F. STEEL ROOF DECK:
      (1) STEEL DECK SHALL BE ERECTED IN ACCORDANCE WITH MANUFACTURER'S SUGGESTED SPECIFICATIONS.
      (2) STEEL ROOF DECK SHALL CONFORM TO ASTM A1008 AND SHALL HAVE A MINIMUM YIELD STRENGTH Fy = 33 KSI. SEE THE DECK SCHEDULE ON SHEET S204.
      (3) DECK TO BE CONTINUOUS OVER A MINIMUM OF 3 SUPPORTS. UNLESS OTHERWISE SHOWN.
      (4) WELD DECK TO ALL SUPPORTS WITH PUDDLE WELDS. DECK MUST BE CAPABLE OF WITHSTANDING A DIAPHRAGM SHEAR NOTED IN THE DECK SCHEDULE. CONNECT PANEL SEAMS WITH SELF-TAPPING SCREWS, PUDDLE WELDS, OR BUTTON PUNCHES AS INDICATED IN THE DECK SCHEDULE. SUBMIT TEST DATA FROM DECK MANUFACTURER FOR DECK SELECTED TO SUBSTANTIATE THAT DECK WILL MEET OR EXCEED REQUIRED DIAPHRAGM SHEAR.
      (5) PROVIDE L3 x 3 x 1/4 FRAMING AROUND ALL OPENINGS LARGER THAN 6".
   G. ALL WELDERS SHALL HAVE EVIDENCE OF PASSING THE A.W.S. STANDARD QUALIFICATION TESTS
   H. SEE ARCHITECTURAL DRAWINGS FOR NAILER HOLES OR OTHER HOLES REQUIRED IN STEEL MEMBERS.

4. MASONRY:
   A. ALL REINFORCING IN MASONRY WALLS SHALL CONFORM TO ASTM A615, GRADE 60 AND SHALL BE FULLY ENCLOSED WITH GROUT. USE PEA GRAVEL WITH fc = 3,000 PSI.
   B. CONCRETE MASONRY SHALL CONSIST OF LIGHTWEIGHT CONCRETE BLOCK WITH A COMPRESSIVE STRENGTH OF 1,900 PSI.
   C. FILL ALL VOIDS AND BLOCK CELLS SOLID WITH MORTAR FOR A DISTANCE OF 24" BENEATH AND 12" EACH SIDE OF ALL BEAM REACTIONS OR OTHER CONCENTRATED LOADS, UNLESS OTHERWISE SHOWN OR NOTED.
   D. MASONRY IS TO BE LAID IN TYPE "M" OR "S" MORTAR IN ACCORDANCE WITH SECTION 2103 OF THE INTERNATIONAL BUILDING CODE. TYPE "N" MASONRY CEMENT MORTAR IS NOT ACCEPTABLE.
   E. MASONRY WALLS MUST BE ADEQUATELY BRACED DURING CONSTRUCTION TO WITHSTAND WIND AND SEISMIC LOADS. BRACING MUST REMAIN IN PLACE UNTIL ROOF (AND FLOOR) DIAPHRAGMS ARE FULLY CAPABLE OF PROVIDING LATERAL SUPPORT.

5. WOOD:
   A. ALL BEAMS AND HEADERS 2 TO 4 INCHES THICK SHALL BE HEM-FIR NO. 2 AND BETTER WITH Fb = 850 PSI AND E = 1,300,000 PSI.
   B. ALL BEAMS 5" AND THICKER SHALL BE HEM-FIR NO. 2 WITH Fb = 850 PSI AND E = 1,300,000 PSI.
   C. ALL POSTS AND COLUMNS 5" AND THICKER SHALL BE HEM-FIR NO. 2 WITH Fb = 850 PSI AND E = 1,300,000 PSI.
   D. STUDS AND PLATES SHALL BE HEM-FIR IN STUD GRADE WITH Fb = 800 PSI AND E = 1,200,000 PSI.
   E. LAMINATED VENEER LUMBER (L.V.L.) SHALL BE "MICRO-LAM" OR AN APPROVED EQUAL WITH Fb = 2,600 PSI AND E = 1,900,000 PSI.
   F. GLUE LAMINATED BEAMS:
      (1) ALL LAMINATED MEMBERS SHALL BE FABRICATED WITH ONE OF THE FOLLOWING SPECIES: DOUGLAS FIR, HEMLOCK, LARCH, OR SOUTHERN PINE.
      (2) LAMINATED MEMBERS SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE DESIGN AND FABRICATION OF STRUCTURAL GLUED LAMINATED LUMBER. PUBLISHED BY THE A.I.T.C. AND THE APPROPRIATE LUMBER PRODUCER'S ASSOCIATION.
      (3) LAMINATED MEMBERS SHALL BE FABRICATED AS FOLLOWS:
         a. BEAMS:
            SIMPLE SPAN ---------- 24F-V4
            CONTINUOUS AND CANTILEVERS ---------- 24F-V8
         b. COLUMNS:
            COMBINATION SYMBOL ---------- 4
      (4) LAMINATED MEMBERS SHALL BE BUILT UP USING 2" NOMINAL MATERIAL. LAMINATED MEMBER SIZES NOTED ARE NET.
      (5) MEMBERS EXPOSED TO VIEW SHALL BE FURNISHED IN "ARCHITECTURAL" APPEARANCE GRADE. MEMBERS TO BE CONCEALED BY FINISH MATERIALS OR CEILINGS MAY BE "INDUSTRIAL" GRADE.
      (6) ADHESIVES USED SHALL COMPLY WITH THE SPECIFICATIONS AS CONTAINED IN VOLUNTARY PRODUCT STANDARD PS56-73, STRUCTURAL GLUED LAMINATED TIMBER. WET-USE ADHESIVES ARE TO BE USED FOR ALL MEMBERS EXPOSED TO THE WEATHER.
   G. BUILT UP BEAMS OF DIMENSIONAL LUMBER OR LAMINATED VENEER LUMBER SHALL BE ATTACHED TOGETHER WITH 16d COMMON NAILS @ 32" O.C. TOP AND BOTTOM, STAGGERED. PROVIDE 2-16d COMMON NAILS AT BEAM ENDS AND INTERMEDIATE SUPPORTS.
   H. LAMINATED STRAND LUMBER (L.S.L.) RIM BOARDS SHALL BE "TIMBERSTRAND" BY TRUS-JOIST OR AN APPROVED EQUAL WITH Fb = 1,700 PSI AND E = 1,300,000 PSI.

6. FOUNDATIONS:
   FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS BY HUDDLESTON BERRY ENGINEERING AND TESTING, L.L.C., JOB #00390-0003. RECOMMENDATIONS IN THIS REPORT SHOULD BE FOLLOWED.
      A. ALLOWABLE SOIL BEARING PRESSURE ---------- 1,500 PSF
   SOILS ENGINEER OF RECORD SHALL EXAMINE THE EXCAVATION TO VERIFY SOIL CONDITIONS AND BEARING CAPCITIES PRIOR TO CONSTRUCTION.

7. SPECIAL INSPECTIONS:
   A. SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SCHEDULE ON SHEET S101.

8. ALL DIMENSIONS ON STRUCTURAL DRAWINGS TO BE CHECKED AGAINST ARCHITECTURAL. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION.

9. VERIFY ALL OPENINGS THROUGH FLOORS, ROOF, AND WALLS WITH MECHANICAL AND ELECTRICAL REQUIREMENTS.

GENERAL NOTES

1. LIVE LOADS USED IN DESIGN:
   A. ROOF:
      FLAT ROOF SNOW LOAD Pf ---------- 30 PSF
      GROUND SNOW LOAD Pg ---------- 36 PSF
      SNOW EXPOSURE FACTOR Ce ---------- 1.0
      SNOW LOAD IMPORTANCE FACTOR Is ---------- 1.2
      THERMAL FACTOR Ct ---------- 1.0
   C. STORAGE ROOMS ---------- 125 PSF
   D. STAIRS ---------- 100 PSF
   E. WIND:
      EXPOSURE ---------- C
      RISK CATEGORY ---------- IV
      V ULT. ---------- 120 MPH
      V ASD ---------- 93 MPH
      COMPONENTS AND CLADDING (BASED ON EFFECTIVE AREA = 18 SQ. FT.)
      TYPICAL WALL AREA (INWARD PRESSURE) ---------- 16 PSF
      TYPICAL WALL AREA (OUTWARD PRESSURE) ---------- 16 PSF
      WALL CORNERS (OUTWARD PRESSURE) ---------- 20 PSF
      TYPICAL ROOF AREA (OUTWARD PRESSURE) ---------- 22 PSF
      ROOF EAVES, RAKES, RIDGES & CORNERS (OUTWARD PRESSURE) ---------- 31 PSF
      PARAPETS (INWARD OR OUTWARD PRESSURE) ---------- 29 PSF
   F. SEISMIC:
      RISK CATEGORY ---------- IV
      IMPORTANCE FACTOR (Ie) ---------- 1.50
      R COEFFICIENT:
         APPARATUS BAY ---------- 2.00
         LIVING QUARTERS AND OFFICES ---------- 6.50
      SPECTRAL RESPONSE COEFFICIENTS:
      Ss ---------- 0.237
      S1 ---------- 0.070
      SDS ---------- 0.253
      SD1 ---------- 0.112
      SEISMIC RESPONSE COEFFICIENTS:
      Cs ---------- 0.19
      SITE CLASS ---------- D
      SEISMIC DESIGN CATEGORY ---------- C
      BASIC SEISMIC:
      FORCE RESISTING SYSTEM:
         APPARATUS BAY AND LOCKER ROOMS ---------- ORDINARY REINFORCED MASONRY SHEAR WALLS
         LIVING QUARTERS AND OFFICES ---------- WOOD STRUCTURAL PANEL SHEAR WALLS
      DESIGN BASE SHEAR ---------- 140K
      ANALYSIS PROCEDURE ---------- EQUIVALENT LATERAL FORCE PROCEDURE

2. CONCRETE:
   A. CONCRETE MIX TABLE (NORMAL WEIGHT CONCRETE):

INTENDED USE	28 DAY STRENGTH F'C (KSI)	MAX W.C. (INCLUDING FLY ASH)	MAX AGGR. (IN) (1)	SLUMP LIMITS (IN) (1)	TOTAL AIR LIMITS (%) (2)	CEMENT TYPE	CONCRETE TYPE NORMAL WEIGHT-NW LIGHT WEIGHT-LW	REQ'D ADMIXTURES (3)	OTHER REQUIREMENTS (4)
STEMWALLS, PILASTERS & FOOTINGS	4	0.45	3/4	4	6	II	NW	AE	FAR
INTERIOR SLABS ON GRADE	3.5	0.45	1 1/2	4	N	II	NW	--	SOG

NOTES:
   (1) FOR THE MAXIMUM COARSE AGGREGATE SIZE INDICATED, USE THE FOLLOWING AGGREGATE SIZE NUMBERS PER ASTM C33:
      3/4" - #67 AGGREGATE
      1" - #57 AGGREGATE
   (2) TOTAL AIR CONTENT LIMITS INCLUDE BOTH ENTRAINED AND ENTRAPPED AIR +/- 1 1/2%. 'N' IN COLUMN INDICATES ADDITION OF ENTRAINED AIR IS NOT PERMITTED.
   (3) ABBREVIATIONS FOR REQUIRED ADMIXTURES AS FOLLOWS:
      AE = AIR-ENTRAINING ADMIXTURE. DO NOT USE ENTRAINED AIR FOR STEEL TROWELED FINISHED FLOORS.
      WRA = WATER REDUCING ADMIXTURE.
   (4) ABBREVIATIONS FOR OTHER REQUIREMENTS AS FOLLOWS:
      FAR = 20% CLASS F FLY ASH REQUIRED.
      SOG = CONTRACTOR TO VERIFY ALKALINITY OF CONCRETE SURFACE, SLAB VAPOR TRANSMISSION, AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOORING SYSTEM AND ADHESIVES PRIOR TO INSTALLING FLOORING. AMOUNT OF CEMENTITIOUS MATERIALS LISTED SHALL BE PROVIDED, DO NOT USE LESS AND DO NOT SUPPLY OVER 5% MORE.
   (5) FOR CONCRETE PLACED BY PUMPING, PROVIDE CONCRETE MIX FLOWABILITY TO FACILITY PUMPING.
   B. ALL REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT COLUMN TIES, BEAM STIRRUPS, AND DOWELS TO SLAB ON GRADE WHICH MAY BE GRADE 40.
   C. NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAIL OR AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES, WHERE PERMITTED, SHALL BE A MINIMUM OF 40 BAR DIAMETERS UNLESS OTHERWISE SHOWN OR NOTED. MAKE ALL BARS CONTINUOUS AROUND CORNERS.
   D. STAGGER SPLICES A MINIMUM OF 4'-0" FOR TOP AND BOTTOM CONTINUOUS BARS IN FOUNDATIONS, UNLESS OTHERWISE SHOWN OR NOTED.
   E. DETAIL BARS IN ACCORDANCE WITH A.C.I. DETAILING MANUAL AND A.C.I. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, LATEST EDITIONS.
   F. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING (INCLUDING W.W.F.) AT POSITIONS SHOWN ON THE DRAWINGS. DO NOT ATTEMPT TO POSITION ANY REINFORCEMENT BY LIFTING DURING CONCRETE PLACEMENT.
   G. REINFORCEMENT PROTECTION SHALL BE AS FOLLOWS:
      (1) CONCRETE POURED AGAINST EARTH ---------- 3"
      (2) FORMED CONCRETE EXPOSED TO EARTH OR WEATHER ---------- 2"
      (3) FORMED STAIRS OR WALLS NOT EXPOSED TO WEATHER ---------- 3/4"
   H. PLACE 2-#5 (ONE EACH FACE) WITH 2'-0 PROJECTION AROUND ALL OPENINGS IN CONCRETE UNLESS OTHERWISE SHOWN OR NOTED.
   I. SLABS, BEAMS, AND GRADE BEAMS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE. ANY STOP IN CONCRETE WORK MUST BE MADE AT MIDDLE OF SPAN WITH VERTICAL BULKHEADS AND KEYS AS SHOWN PER THE TYPICAL CONCRETE WALL CONSTRUCTION JOINT DETAIL. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS APPROVED BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
   J. WIRE FABRIC REINFORCEMENT MUST LAP ONE FULL MESH +2" AT SIDE AND END LAPS, AND SHALL BE TIED TOGETHER.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

GENERAL NOTES

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: KDN CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: S100

PROJECT NO: 14.108

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SPECIAL INSPECTIONS:
A. SPECIAL INSPECTIONS SHALL COMPLY WITH CHAPTER 17 OF THE 2012 I.B.C.
B. STATEMENT OF REQUIRED SPECIAL INSPECTIONS:

SYSTEM OF COMPONENT	VERIFICATION OF INSPECTION TASK	FREQUENCY (DURING TASK LISTED)		APPLICABLE CODE & SECTION FOR INSPECTION CRITERIA
		CONTINUOUS	PERIODIC	
1) SOILS	a) VERIFY SOILS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	--	X	--
	b) VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH & HAVE REACHED PROPER MATERIAL	--	X	--
	c) PERFORM CLASSIFICATION & TESTING OF CONTROLLED FILL MATERIALS	--	X	--
	d) VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT & COMPLETION OF CONTROLLED FILL	X	--	--
	e) OBSERVE SUBGRADE FOR PROPER PREPARATION BEFORE PLACEMENT OF CONTROLLED FILL	--	X	--
2) CONCRETE	a) INSPECT REINFORCING STEEL	--	X	ACI 318: 3.5, 7.1-7.7
	b) VERIFY USE OF REQUIRED DESIGN MIX	--	X	ACI 318: CH. 4, 5.2-5.4 IBC 1904.2
	c) INSPECT REINFORCING STEEL WELDING	--	X	AWS D1.4 ACI 318: 3.5.2
	d) FABRICATE TEST SPECIMENS FROM FRESH CONCRETE FOR STRENGTH TESTS, SLUMP & AIR CONTENT TESTS AND TO DETERMINE CONCRETE TEMPERATURE	X	--	ASTM C172 ASTM C31 ACI 318: 5.6, 5.8
	e) INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	--	ACI 318: 5.9, 5.10
	f) INSPECT FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE & TECHNIQUES	--	X	ACI 318: 5.11- 5.13
	g) INSPECT FORMWORK FOR SHAPE, LOCATION & DIMENSIONS OF CONCRETE MEMBERS BEING FORMED	--	X	ACI 318: 6.1.1
	h) INSPECT ANCHORS CAST INTO CONCRETE.	--	X	ACI 318: 8.1.3, 21.2.8 IBC 1908.5, 1909.1
	i) INSPECT ANCHORS POST-INSTALLED INTO HARDENED CONCRETE MEMBERS.	--	X	ACI 318: 3.8.6, 8.1.3, 21.2.8 IBC 1909.1
3) WOOD	a) INSPECT FABRICATED WOOD STRUCTURAL MEMBERS ASSEMBLED AT FABRICATOR'S SHOP OR PLANT.	--	X	--
	b) VERIFY MATERIAL SPECIES AND GRADES OF DIMENSIONAL LUMBER AND PLYWOOD OR O.S.B.	--	X	--
	c) VERIFY BOTTOM CHORD AND OTHER BRACING OF STRUCTURAL MEMBERS.	--	X	--
	d) INSPECT FOR PROPER FASTENING OF WOOD COMPONENTS.	--	X	IBC TABLE 2304.9.1
4) LATERAL BRACING SYSTEM	a) PERIODICALLY INSPECT NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS WITHIN WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, AND HOLDOWNS.	--	X	--
5) MASONRY	a) VERIFY f'm OF CONCRETE MASONRY UNITS PRIOR TO CONSTRUCTION.	--	X	ACI 530: Art 2.6A
	b) AS MASONRY CONSTRUCTION BEGINS VERIFY THE FOLLOWING TO ENSURE COMPLIANCE:			
	- PROPORTIONS OF SITE – PREPARED MORTAR	--	X	ACI 530: Art 1.4B
	- CONSTRUCTION OF MORTAR JOINTS	--	X	ACI 530: Art 3.3B
	- LOCATION OF REINFORCEMENT CONNECTORS & ANCHORAGES	--	X	ACI 530: Art 3.4, 3.6A
	c) THE INSPECTION PROGRAM SHALL VERIFY:			
	- SIZE & LOCATION OF STRUCTURAL ELEMENTS	--	X	ACI 530: Art 3.36
	- TYPE, SIZE & LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS	--	X	ACI 530: SECTION 1.22(e), 7.1.4, 3.1.6
	- SPECIFIED SIZE, GRADE, AND TYPE OF REINFORCEMENT	--	X	ACI 530: SECTION 1.13, Art 2.4, 3.4
	- WELDING OF REINFORCING BARS	X	--	ACI 530: SECTION 2.1.10.7.2, 3.3.34(B)
	- PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40°F) OR HOT WEATHER (TEMP ABOVE 90°F)	--	X	IBC 2104.3, 2104.4 ACI 530 Art 1.8C, 1.8D
	d) PRIOR TO GROUTING, VERIFY THE FOLLOWING TO ENSURE COMPLIANCE:			
	- GROUT SPACE IS CLEAR	--	X	ACI 530: Art 3.2D
	- PLACEMENT OF REINFORCEMENT, CONNECTORS & ANCHORAGES	--	X	ACI 530: SECTION 1.13, Art 3.4
	- PROPORTIONS OF SITE PREPARED GROUT	--	X	ACI 530: Art 2.6B
	- CONSTRUCTION OF MORTAR JOINTS	--	X	ACI 530: Art 3.3B
	e) VERIFY GROUT PLACEMENT TO ENSURE COMPLIANCE WITH CODE & CONSTRUCTION DOCUMENT PROVISIONS	X	--	ACI 530: Art 3.5
	f) OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS	X	--	IBC 2105.2.2, 2105.3 ACI 530: Art 1.4
	g) VERIFY COMPLIANCE WITH INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND COMPLIANCE WITH THE APPROVED SUBMITTALS	--	X	ACI 530: Art 1.5
6) STEEL	a) MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS, NUTS & WASHERS			
	- IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	--	X	APPLICABLE ASTM MATERIAL SPEC. AISC 360, SECTION A3.3
	- MANUFACTURER's CERTIFICATE OF COMPLIANCE REQUIRED	--	X	--
	b) INSPECTION OF HIGH-STRENGTH BOLTING OF BEARING TYPE CONNECTIONS	--	X	AISC 360, SECTION M2.5 IBC SECTION 1704.3.3
	c) MATERIAL VERIFICATION OF STRUCTURAL STEEL:			
	- IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	--	X	ASTM A6 OR A568 IBC SECTION 1708.4
	- MANUFACTURER'S CERTIFIED MILL TEST REPORTS	--	X	ASTM A6 OR A568 IBC SECTION 1708.4
	d) MATERIAL VERIFICATION OF WELD FILLER MATERIALS:			
	- IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS	--	X	AISC 360, SECTION A3.5
	- MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED	--	X	--
	e) INSPECTION OF WELDING			
	1) COMPLETE & PARTIAL PENETRATION GROOVE WELDS	X	--	AWS D1.1 AISC 360 N5.4-N5.5
	2) MULTI-PASS FILLET WELDS	X	--	AWS D1.1 AISC 360 N5.4-N5.5
	3) SINGLE PASS FILLET WELDS > 5/16"	X	--	AWS D1.1 AISC 360 N5.4-N5.5
	4) SINGLE PASS FILLET WELDS < 5/16"	--	X	AWS D1.1 AISC 360 N5.4-N5.5
	5) FLOOR & ROOF DECK WELDS	--	X	AWS D1.3
	f) STUD SHEAR CONNECTOR SIZES, SPACING, MATERIALS & QUANTITY	X	--	AISC 360, SECTION N6
	g) WELDING OF STUD SHEAR CONNECTORS	--	X	AWS D1.1
	h) INSPECT STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS	--	X	AISC 360 N5.7
7) COLD-FORMED STEEL FRAMING	a) MATERIAL CERTIFICATION OF COLD FORMED STEEL:			
	- IDENTIFICATION MARKINGS TO CONFORM TO ASTM SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS	--	X	A.1.S.I NAS-01
	- MANUFACTURER's CERTIFICATE OF COMPLIANCE REQUIRED	--	X	--
	b) VERIFY SIZES AND SPACING OF MEMBERS FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS	--	X	--
	c) VERIFY WELDS AND CONNECTORS FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS	--	X	--
	d) VERIFY POWDER DRIVEN FASTENER SPACING, SIZES AND INSTALLATION FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS	--	X	--
8) STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL	a) MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:			
	1) IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	--	X	APPLICABLE ASTM MATERIAL SPEC.
	2) MANUFACTURER'S CERTIFIED TEST REPORTS	--	X	--
	b) INSPECTION OF WELDING:			
	1) COLD-FORMED STEEL DECK:			
	a) FLOOR AND ROOF DECK WELDS	--	X	AWS D1.3
	2) REINFORCING STEEL			
	a) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706	--	X	AWS D1.4 ACI 318: SECTION 3.5.2
	b) SHEAR REINFORCEMENT	X	--	AWS D1.4 ACI 318: SECTION 3.5.2
	c) OTHER REINFORCING STEEL	--	X	AWS D1.4 ACI 318: SECTION 3.5.2
9) SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE	a) STRUCTURAL STEEL			
	- INSPECTION OF STRUCTURAL STEEL ELEMENTS OF THE SEISMIC FORCE RESISTING SYSTEM	--	X	AISC 341
	b) TESTING AND QUALIFICATION FOR SEISMIC RESISTANCE			
	- TEST STRUCTURAL STEEL ELEMENTS OF THE SEISMIC FORCE RESISTING SYSTEM IN ACCORDANCE WITH AISC QUALITY ASSURANCE REQUIREMENTS	--	X	AISC 341
	- VERIFY STEEL REINFORCEMENT USED IN CONCRETE ELEMENTS OF THE SEISMIC FORCE RESISTING SYSTEM BY CERTIFIED MILL TEST REPORTS FOR EACH SHIPMENT OF REINFORCEMENT	--	X	ACI 318, SECTION 21.1.5.2
	- FOR WELDED REINFORCING STEEL OTHER THAN ASTM A706 IN CONCRETE ELEMENTS OF THE SEISMIC FORCE RESISTING SYSTEM, PERFORM CHEMICAL TESTS TO VERIFY WELDABILITY	--	X	ACI 318, SECTION 3.5.2
	c) INSPECTION AND SEISMIC CERTIFICATION OF NON-STRUCTURAL COMPONENTS			
	1) INSPECT INSTALLATION AND ANCHORAGE OF MECHANICAL AND ELECTRICAL COMPONENTS REQUIRING ANCHORAGE AGAINST SEISMIC FORCES	--	X	IBC SECTION 1705.11.6, ASCE 7, SECTION 13.6
	2) CERTIFY BY TESTING OR EXPERIENCE DATA THAT MECHANICAL AND ELECTRICAL EQUIPMENT WILL REMAIN OPERABLE FOLLOWING THE DESIGN SEISMIC GROUND MOTION	--	X	IBC SECTION 1705.11.4, IBC SECTION 1705.12.3
	a) FOR SYSTEMS REQUIRING SEISMIC CERTIFICATION, VERIFY THAT LABELS, ANCHORAGE, OR MOUNTING CONFORM TO THE CERTIFICATE OF COMPLIANCE	--	X	IBC SECTION 1705.12.3, ASCE 7, SECTION 13.2
	3) INSPECT FABRICATION AND INSTALLATION OF ISOLATOR UNITS AND ENERGY DISSIPATION DEVICES IN SEISMIC ISOLATION SYSTEMS	--	X	IBC SECTION 1705.11.8
	4) TEST SEISMIC ISOLATION SYSTEMS	--	X	ASCE 7, SECTION 17.8

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SCHEDULE OF SPECIAL INSPECTIONS

NO: ISSUED FOR: DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: S101

PROJECT NO: 14.108

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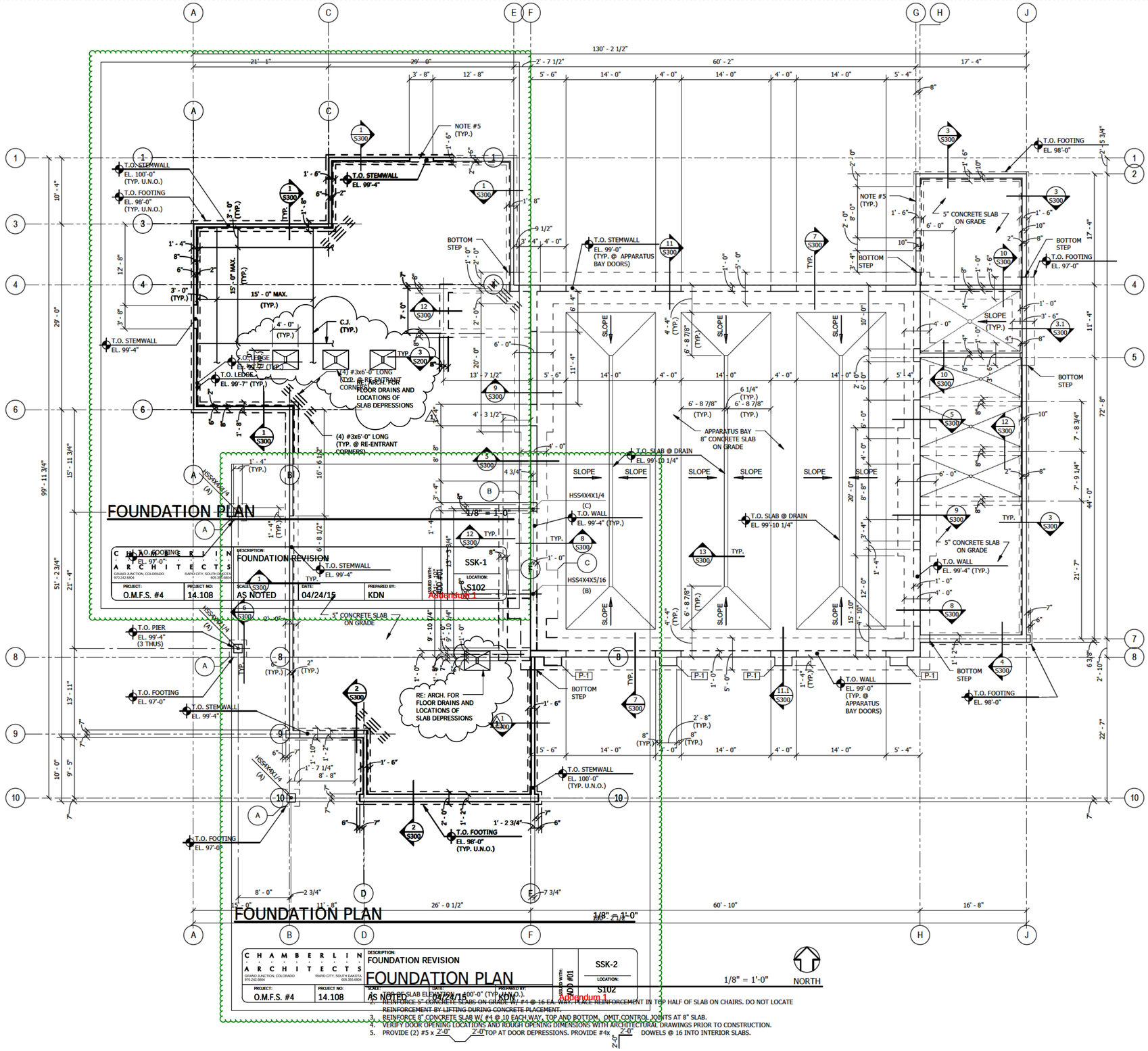

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FOUNDATION PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG, KDN CHECKED BY: JAD

DATE: 04/10/15

SHEET NO: S102

PROJECT NO: 14.108

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CHAMBERLIN ARCHITECTS — GRAND JUNCTION, COLORADO — RAPID CITY, SOUTH DAKOTA

DESCRIPTION: FOUNDATION REVISION

PROJECT: O.M.F.S. #4 | PROJECT NO: 14.108 | SCALE: AS NOTED | DATE: 04/24/15 | PREPARED BY: KDN

ISSUED WITH: 10% CDs

LOCATION: S102

SSK-1

Addendum 1

FOUNDATION PLAN

1/8" = 1'-0"

CHAMBERLIN ARCHITECTS — GRAND JUNCTION, COLORADO — RAPID CITY, SOUTH DAKOTA

DESCRIPTION: FOUNDATION REVISION

PROJECT: O.M.F.S. #4 | PROJECT NO: 14.108 | SCALE: AS NOTED | DATE: 04/24/15 | PREPARED BY: KDN

ISSUED WITH: 10% CDs

LOCATION: S102

SSK-2

Addendum 1

FOUNDATION PLAN

1/8" = 1'-0"

NORTH

1. TOP OF SLAB ELEVATION = 100'-0" (TYP. U.N.O.).
2. REINFORCE 5" CONCRETE SLABS ON GRADE W/ #4 @ 16 EA. WAY. PLACE REINFORCEMENT IN TOP HALF OF SLAB ON CHAIRS. DO NOT LOCATE REINFORCEMENT BY LIFTING DURING CONCRETE PLACEMENT.
3. REINFORCE 8" CONCRETE SLAB W/ #4 @ 10 EACH WAY, TOP AND BOTTOM. OMIT CONTROL JOINTS AT 8" SLAB.
4. VERIFY DOOR OPENING LOCATIONS AND ROUGH OPENING DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
5. PROVIDE (2) #5 x 2'-0" 2'-0" TOP AT DOOR DEPRESSIONS. PROVIDE #4x 2'-0" DOWELS @ 16 INTO INTERIOR SLABS.

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

OWNER
ARCHITECT
CONTRACTOR
FIELD
OTHER

PROJECT: Orchard Mesa Fire Station #4

OWNER: City of Grand Junction

TO: FCI Constructors, Inc.
3070 I-70 B, Bldg A
Grand Junction, CO 81504

ARCHITECT'S SUPPLEMENTAL INSTRUCTION NO: Three (3)

ARCHITECT: Chamberlin Architects
437 Main Street
Grand Junction, CO 81501

ARCHITECT'S PROJECT NO: 1443

DATE OF ISSUANCE: July 21, 2015

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

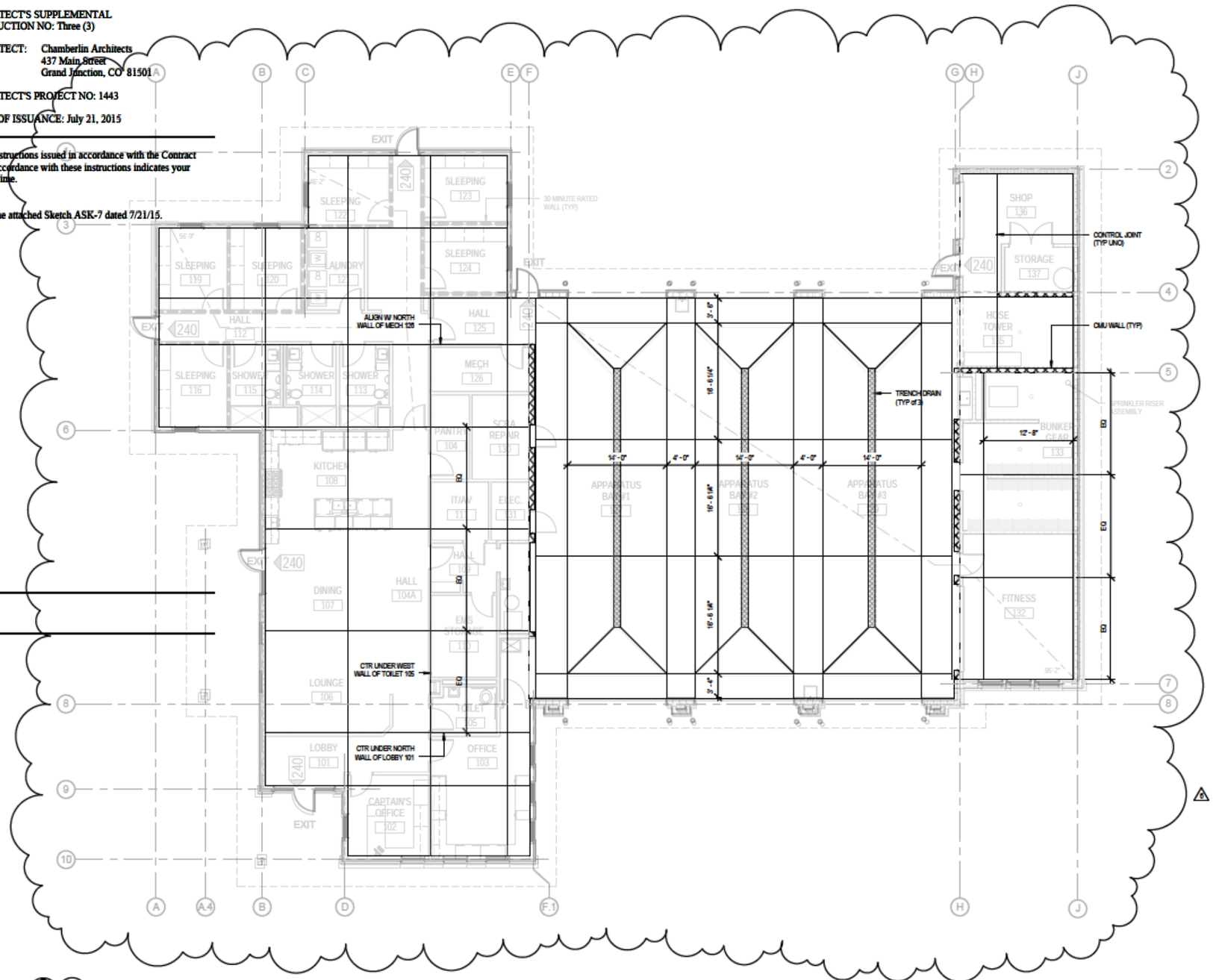
Add FLOOR PLAN – CONTROL JOINT LAYOUT as illustrated in the attached Sketch ASK-7 dated 7/21/15.

Attachments: ASK-7

ARCHITECT: Chamberlin Architects, P.C.

BY: Jonathan West

S:\1443 - Orchard Mesa Fire Station #4\6. CONSTRUCTION\ASI\ASI#003.1443.doc



1 ASK-7 FLOOR PLAN - CONTROL JOINT LAYOUT

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FLOOR PLAN - CONTROL JOINT LAYOUT

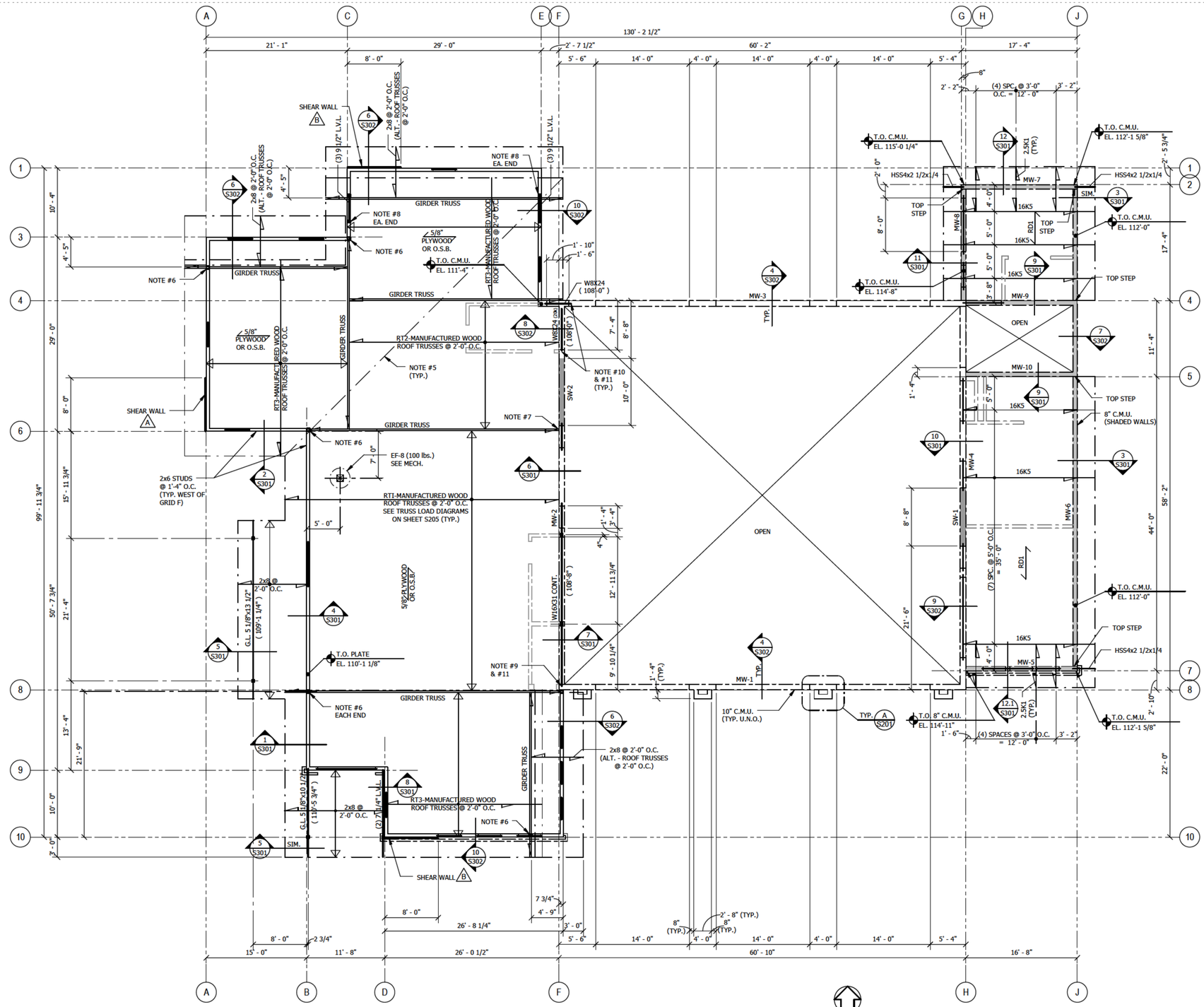
NO:	ISSUED FOR:	DATE:
1	ASI#003	7/21/15

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 05/27/2015 SHEET NO:

PROJECT NO: 1443 **ASK-7**



LOW ROOF FRAMING PLAN

1/8" = 1'-0" NORTH

1. TOP OF BEAM ELEVATION NOTED THUS: (XXX'-XX").
2. PROVIDE JOIST BRIDGING IN ACCORDANCE WITH S.J.I. SPECIFICATIONS.
3. UNLESS NOTED OTHERWISE, ALL EXTERIOR HEADERS IN WOOD FRAMED WALLS SHALL BE 9 1/4" "TJ-INSULATED" HEADERS BY WEYERHAUSER, OR AN ENGINEER APPROVED EQUIVALENT. BEAR ON (2) 2x6 STUDS EACH END, U.N.O.
4. ALL HANGERS REQUIRED AT CONNECTIONS BETWEEN ROOF TRUSSES ARE TO BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED IN THE STRUCTURAL DETAILS.
5. PROVIDE (2) 2x6 BLOCKING BETWEEN TRUSSES ALONG VALLEY LINE FOR PLYWOOD ATTACHMENT. CONNECT TO TRUSSES WITH SIMPSON TYPE "SUL26-2" HANGER EACH END.
6. BEAR ON (4) 2x6 STUDS.
7. PROVIDE SIMPSON TYPE "LGUM210-3-SDS" HANGER WITH (8) 3/8"Ø x0'-4" TITEN HD ANCHORS TO GROUTED CELLS OF C.M.U. HANGER SIZE IS BASED UPON AN ASSUMPTION OF A (3) PLY GIRDER TRUSS. USE "LGUM210-2" FOR A (2) PLY TRUSS OR "LGUM210-4" FOR A (4) PLY TRUSS.
8. BEAR ON (3) 2x6 STUDS.
9. PROVIDE BEARING PLATE 1/2"x6 1/2"x0'-6 1/2". PLACE ON 3/8" MIN. NON-SHRINK GROUT.
10. PROVIDE BEARING PLATE 1/2"x7 1/2"x0'-8 1/2", W/ 8" LENGTH PARALLEL TO BEAM SPAN. PLACE ON 3/8" MIN. NON-SHRINK GROUT.
11. PROVIDE (2) 5/8"Øx1'-0" LONG HEADED ANCHOR BOLTS WITH MINIMUM 8" EMBEDMENT.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LOW ROOF FRAMING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG, KDN CHECKED BY: JAD

DATE: 04/10/15

SHEET NO: S103

PROJECT NO: 14.108

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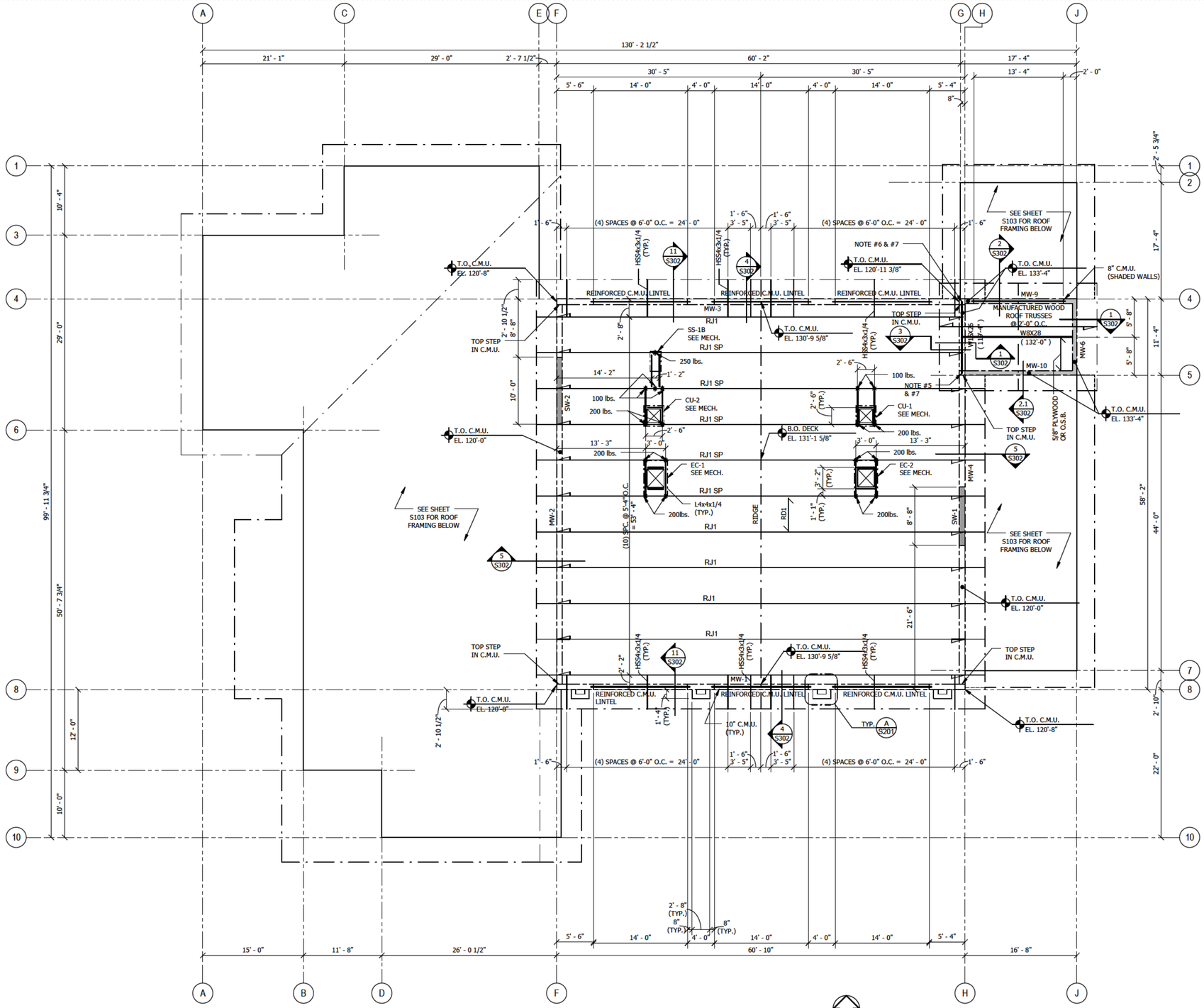

UPPER ROOF FRAMING PLAN

1/8" = 1'-0" NORTH

1. TOP OF STEEL ELEVATION NOTED THUS: (XXX'-XX").
2. STEEL ROOF JOISTS SHALL BE LH TYPE IN A GABLE CONFIGURATION WITH A TOP CHORD PITCH OF 4:12. SEE LOAD DIAGRAMS ON SHEET S203.
3. PROVIDE JOIST BRIDGING IN ACCORDANCE WITH S.J.I. SPECIFICATIONS. PROVIDEE BOLTED DIAGONAL BRIDGING AS REQUIRED AT LH JOISTS.
4. VERIFY LOCATIONS, DIMENSIONS, AND WEIGHTS OF MECHANICAL UNITS AND VERIFY DIMENSIONS OF DUCT OPENINGS PRIOR TO FABRICATION AND CONSTRUCTION.
5. PROVIDE BEARING PLATE 5/8"x6 1/2"x0'-8 1/2" WITH LONG DIMENSION PARALLEL TO BEAM SPAN. PLACE ON 1/2" MIN. NON-SHRINK GROUT.
6. PROVIDE BEARING PLATE 5/8"x7"x0'-8" WITH LONG DIMENSION PERPENDICULAR TO BEAM. PLACE ON 1/2" MIN. NON-SHRINK GROUT.
7. PROVIDE (2) 5/8"Ø x1'-0" LONG HEADED ANCHOR BOLTS W/ MIN. 8" EMBEDMENT.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

UPPER ROOF FRAMING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG, KDN CHECKED BY: JAD

DATE: 04/10/15

SHEET NO: S104

PROJECT NO: 14.108

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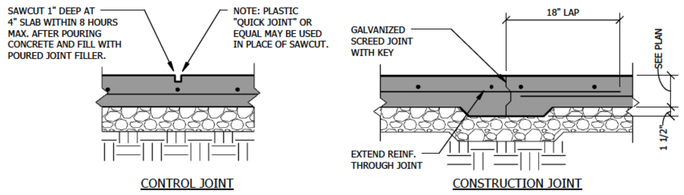
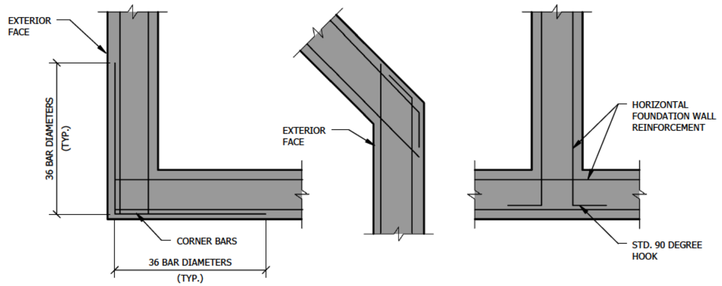
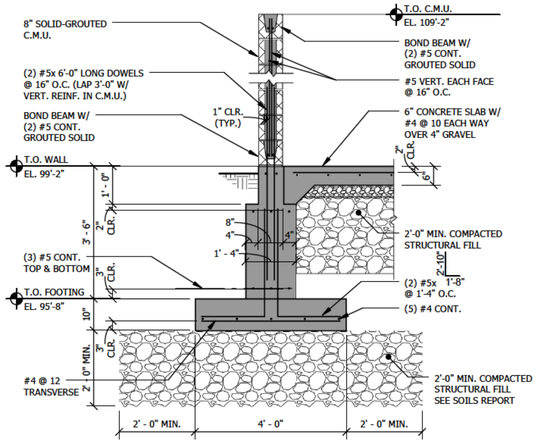


TYPICAL SLAB JOINT DETAILS 1" = 1'-0"

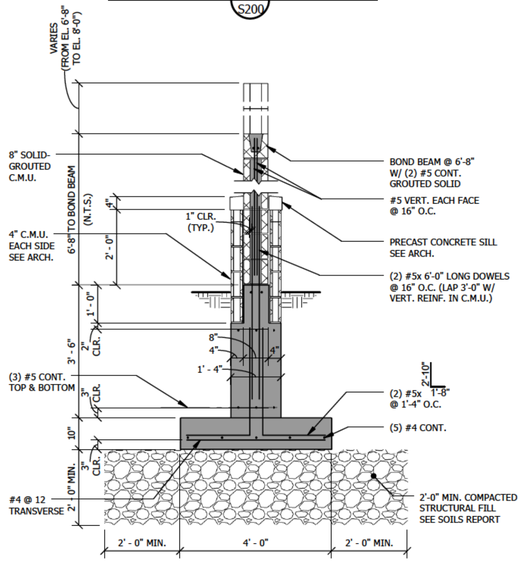


TYPICAL CORNER DETAILS 1" = 1'-0"

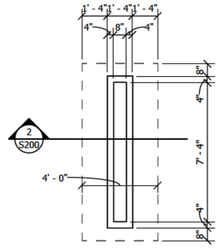
FOOTING SCHEDULE			
MARK	SIZE	REINFORCEMENT	REMARKS
A	2'-8 x 2'-8 x 0'-10	(4) #4 BOTTOM EACH WAY EQUAL SPACING	
B	4'-6 x 4'-6 x 1'-0	(5) #5 BOTTOM EACH WAY EQUAL SPACING	
C	7'-8 x 7'-8 x 1'-0	(8) #5 BOTTOM EACH WAY EQUAL SPACING	



SECTION 1/S200 1/2" = 1'-0"

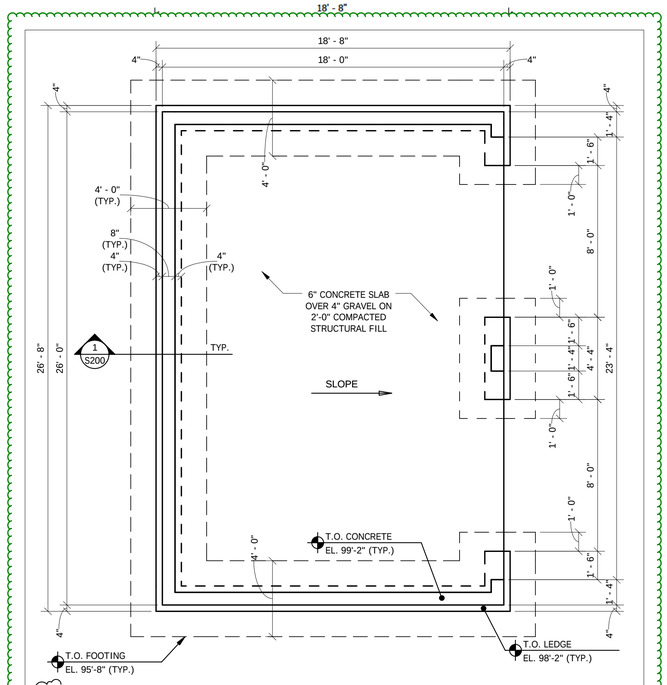


SECTION 2/S200 1/2" = 1'-0"



MONUMENT SIGN PLAN 1/4" = 1'-0" NORTH

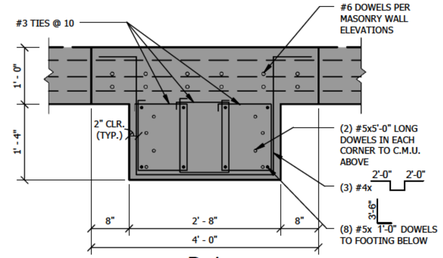
1. SEE ARCH. & CIVIL DRAWINGS FOR LOCATION ON SITE.



UTILITY ENCLOSURE PLAN 1/4" = 1'-0"

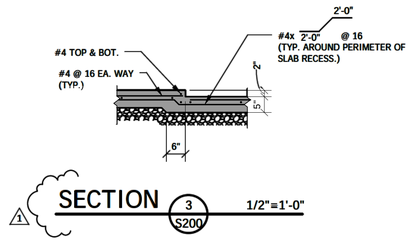
CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804; RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: UTILITY ENCLOSURE REVISION				SSK-4
PROJECT: O.M.F.S. #4	PROJECT NO: 14.108	SCALE: AS NOTED	DATE: 04/24/15	PREPARED BY: KDN	ISSUED WITH: ADD #01 / LOCATION: S200

Addendum 1



P-1

PILASTER DETAILS 3/4" = 1'-0"



SECTION 3/S200 1/2"=1'-0"

CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804; RAPID CITY, SOUTH DAKOTA 605.355.6804)	DESCRIPTION: FOUNDATION REVISION				SSK-3
PROJECT: O.M.F.S. #4	PROJECT NO: 14.108	SCALE: AS NOTED	DATE: 04/24/15	PREPARED BY: KDN	ISSUED WITH: ADD #01 / LOCATION: S200

Addendum 1

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

TYPICAL FOUNDATION DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: S200

PROJECT NO: 14.108

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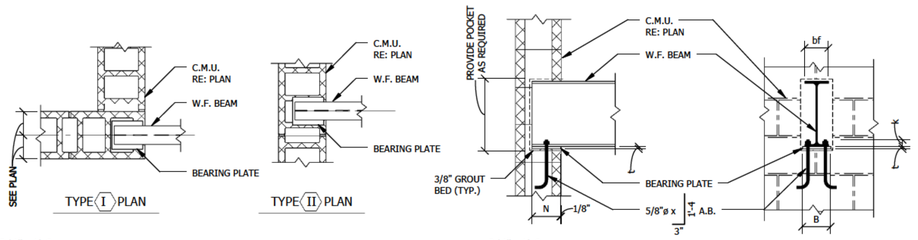
BEAM BEARING PLATES ON C.M.U.



3/4"=1'-0"

TYPE (I)							
BEAM DEPTH	CAPACITY (SERVICE) KIPS	MIN. k	MIN. bf	N 8" / 12"	B	t	# BOLTS
W8, W10	10	5/8"	4"	4" / 8"	6"	1/2"	(1)
W10, W12	15	11/16"	4"	6" / 8"	7"	1/2"	(2)
W12, W14	19	7/8"	5"	6" / 8"	7"	1/2"	(2)

NOTES:
1. CAPACITIES ARE BASED UPON fm' = 1,500 psi. AND MINIMUM MASONRY BEARING (Fp) = .26F'm (SPECIAL INSPECTION REQUIRED).
2. Fy OF BEARING PLATES = 36 ksi.
3. SEE TYPICAL CORNER WITH BEAM BEARING FOR C.M.U. CORNER REINFORCING.

3/4"=1'-0"

TYPE (II)							
BEAM DEPTH	CAPACITY (SERVICE) KIPS	MIN. k	MIN. bf	N 8" / 12"	B	t	# BOLTS
W8, W10	10	5/8"	4"	4" / 6"	6"	1/2"	(1)
W10, W12	15	11/16"	4"	6" / 8"	7"	1/2"	(2)
W12, W14	24	7/8"	5"	6" / 8"	9"	3/4"	(2)
W16, W18	30	1 1/16"	6"	6" / 8"	11"	7/8"	(2)
W18, W21	34	15/16"	6"	6" / 8"	12 1/2"	1"	(2)
W21, W24	38	1 3/8"	7"	6" / 8"	14"	1 1/4"	(2)

NOTES:
1. CAPACITIES ARE BASED UPON fm' = 1,500 psi. AND MINIMUM MASONRY BEARING (Fp) = .26F'm (SPECIAL INSPECTION REQUIRED).
2. Fy OF BEARING PLATES = 36 ksi.

STEEL LOOSE LINTEL SCHEDULE

OPENING	LINTEL		BEARING EA. END	REMARKS
	4" VENEER	8" C.M.U.		
3'-6" OR LESS	L 3 1/2x3x1/4	(2) L 3 1/2x3x1/4	4"	S.L.V.
OVER 3'-6" THRU 5'-6"	L 4x3 1/2x1/4	(2) L 4x3 1/2x1/4	6"	L.L.V.
OVER 5'-6" THRU 7'-6"	L 6x3 1/2x5/16	(2) L 6x3 1/2x5/16	6"	L.L.V.
OVER 7'-6"	SEE PLAN			

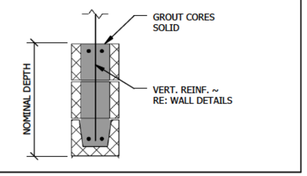
1. FOR OPENINGS OVER 6'-0", PROVIDE SOLID MASONRY JAMB UNDER LINTEL EACH SIDE OF OPENING.

C.M.U. REINFORCING SCHEDULE

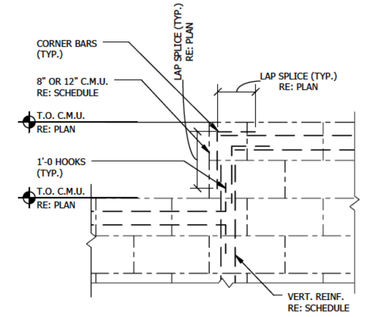
1. PROVIDE #5 @ 32 VERTICAL REINFORCING AT 8" C.M.U. AND #6 @ 24 VERTICAL REINFORCING AT 10" C.M.U. GROUT ALL VERTICAL REINFORCING SOLID. VERTICAL REINFORCEMENT SHALL EXTEND THROUGH BOND BEAMS TO 2" CLR. BELOW TOP OF C.M.U. USE STANDARD LADDER TYPE HORIZONTAL JOINT REINFORCEMENT AT 16" O.C. WITH MINIMUM (2) #9 SIDE RODS AT EACH LADDER.
2. PROVIDE #4 @ 24 VERTICAL REINFORCEMENT AT 6" C.M.U. WALLS. GROUT ALL REINFORCEMENT SOLID. PROVIDE BOND BEAM WITH (1) #6 CONT. AT TOP OF 6" C.M.U. WALLS, AND REINFORCE HORIZONTAL JOINTS WITH STANDARD LADDER TYPE REINFORCEMENT.
3. PROVIDE (2) #5 CONT. VERTICAL EACH SIDE OF ALL OPENINGS AND CONTROL JOINTS. EXTEND 2'-0" MINIMUM EACH SIDE OF OPENING. GROUT SOLID.
4. LAP ALL VERTICAL REINFORCING AS FOLLOWS:
   #4 - MINIMUM OF 2'-0"
   #5 - MINIMUM OF 2'-4"
   #6 - MINIMUM OF 3'-4"
5. PROVIDE #5 x 4'-0" DOWELS @ 24 FROM STEMWALLS TO 8" C.M.U. LAP 2'-4" WITH WALL VERTICAL REINFORCEMENT AND GROUT SOLID. PROVIDE #6 x 5'-2" DOWELS @ 24 FROM STEMWALLS TO 10" C.M.U. LAP 3'-6" WITH WALL VERTICAL REINFORCEMENT AND GROUT SOLID.

ALTERNATE REINFORCED MASONRY LINTEL SCHEDULE

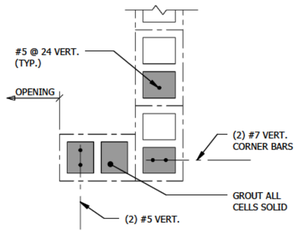
TYPE	CLEAR SPAN	NOMINAL DEPTH	REINF.	TYPICAL DETAIL
(A)	2'-0" TO 4'-0"	16"	(2) #4 BOT.	
(B)	4'-4" TO 8'-0"	32"	(2) #5 T.&B.	



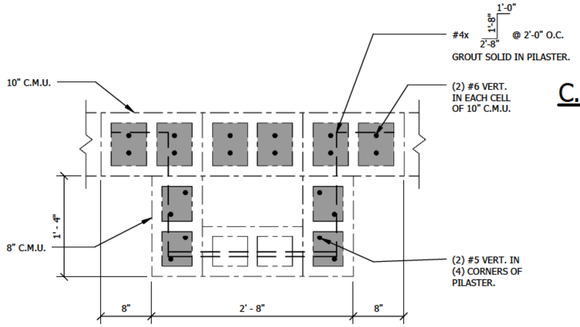
NOTES:
1. CLEAR SPAN INDICATES THE ROUGH MASONRY OPENING WIDTH.
2. PROVIDE 8" MIN. BEARING FOR CLEAR SPAN 8'-0" OR LESS AND 16" MIN. BEARING FOR CLEAR SPAN GREATER THAN 8'-0".
3. EXTEND TOP & BOTTOM REINFORCEMENT 2'-0 BEYOND EDGE OF OPENING EACH SIDE. TERMINATE TOP REINFORCEMENT W/ STD. HOOK AT CONTROL JOINTS OR FREE EDGES.
4. PROVIDE SOLID GROUTED OR SOLID MASONRY JAMB UNDER LINTEL EACH SIDE OF OPENING.



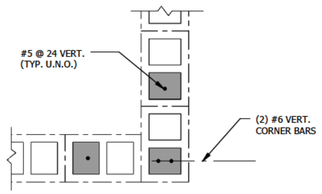
TYP. C.M.U. TOP STEP DETAIL 3/4" = 1'-0"



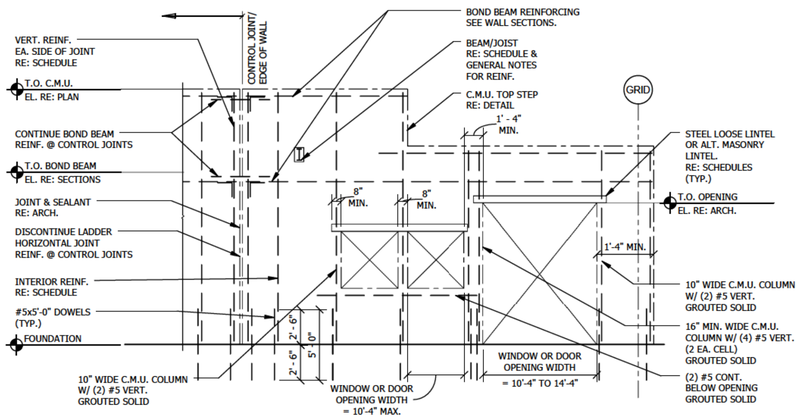
C.M.U. EDGE OPENING 3/4" = 1'-0"



DETAIL A 5201 1" = 1'-0"



C.M.U. CORNER REINF. 3/4" = 1'-0"



TYPICAL C.M.U. WALL ELEVATION N.T.S.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

MASONRY DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: S201

PROJECT NO: 14.108

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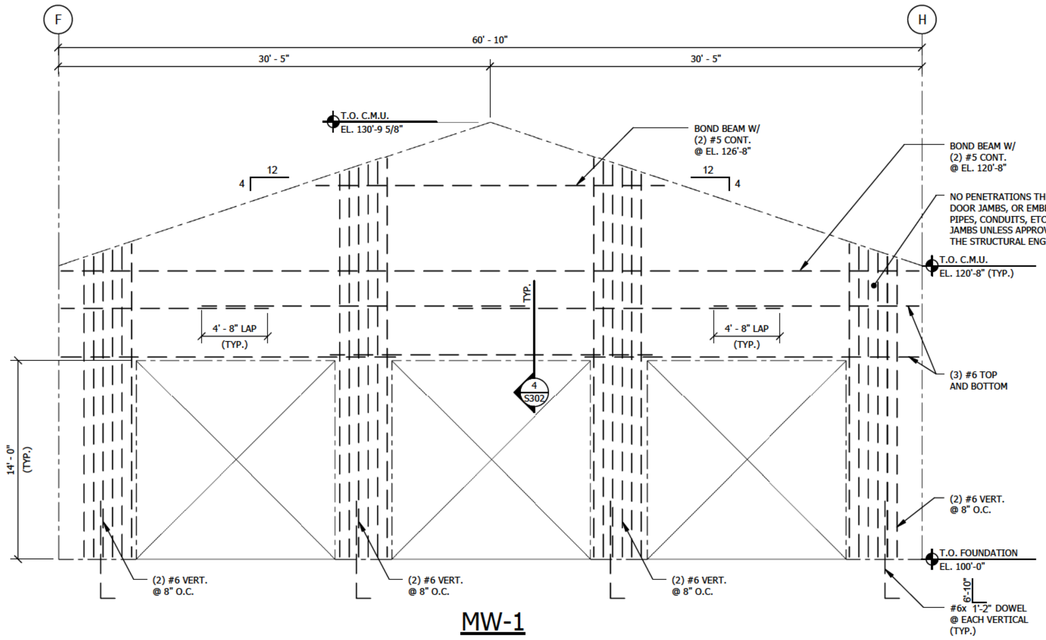
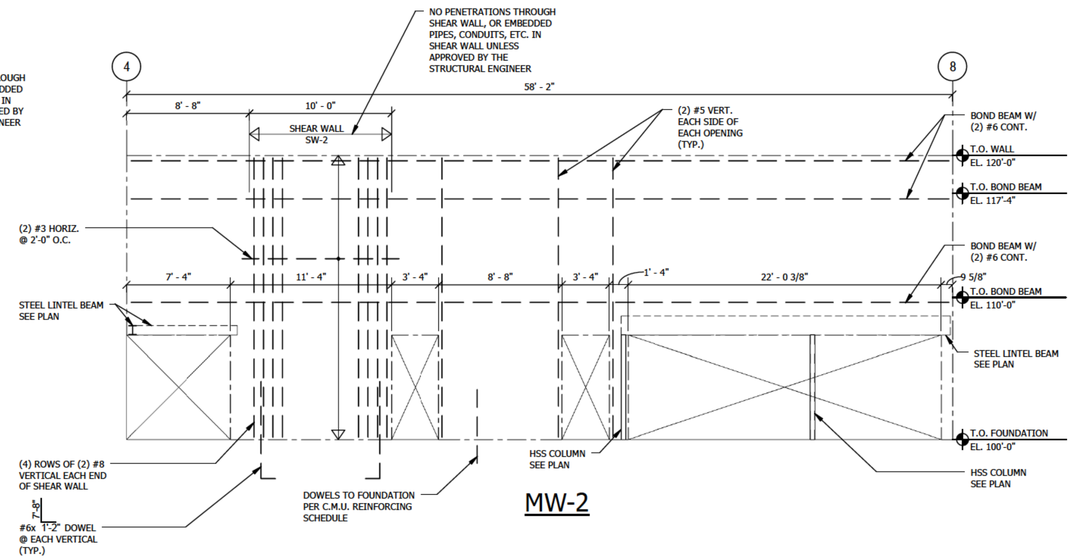


MW-1



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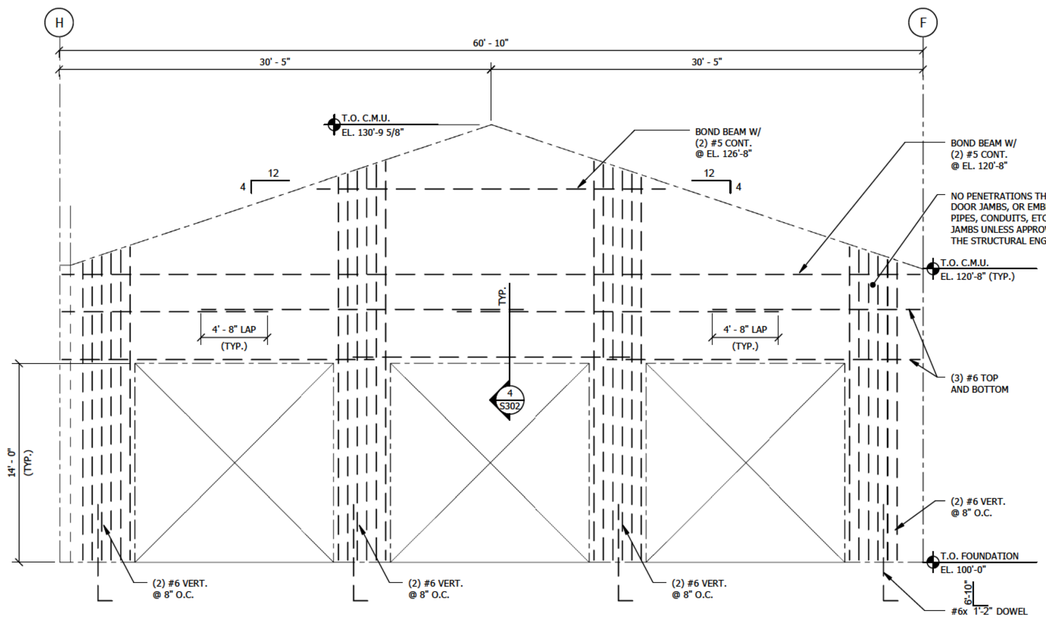

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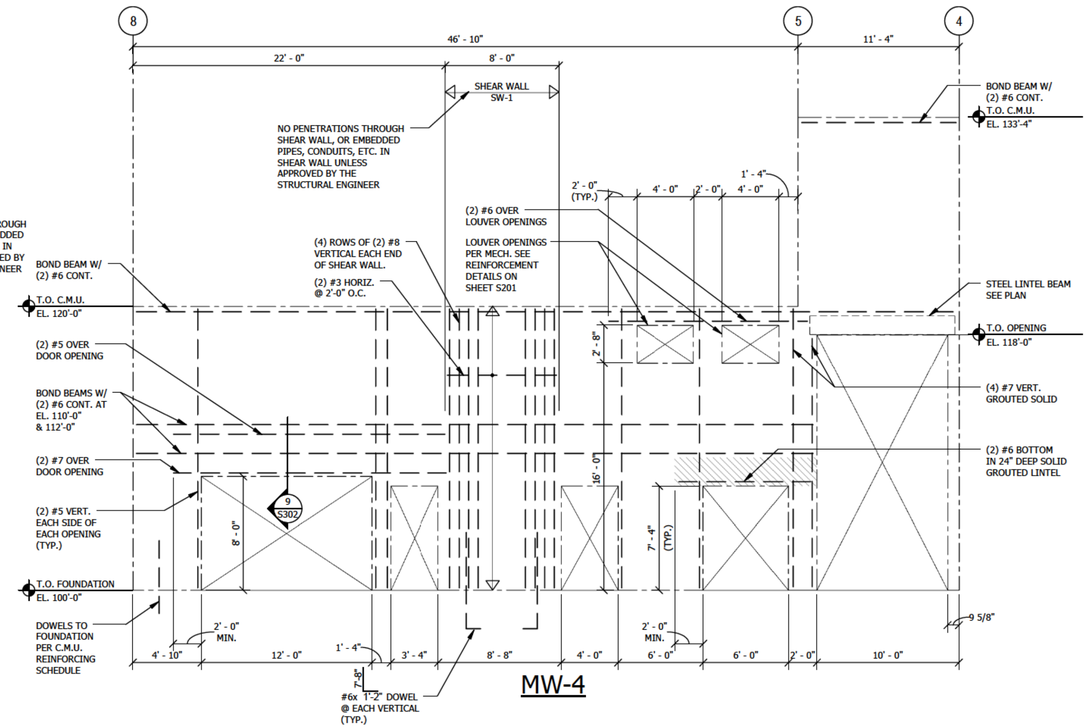

MW-4

MASONRY WALL ELEVATIONS

3/16" = 1'-0"

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

C.M.U. WALL ELEVATIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG CHECKED BY: JAD

DATE: 04/10/15

SHEET NO: S202

PROJECT NO: 14.108

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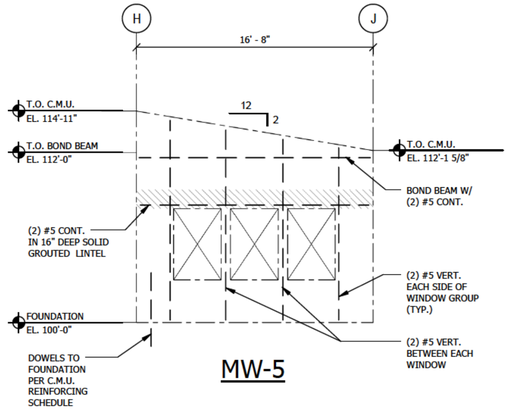

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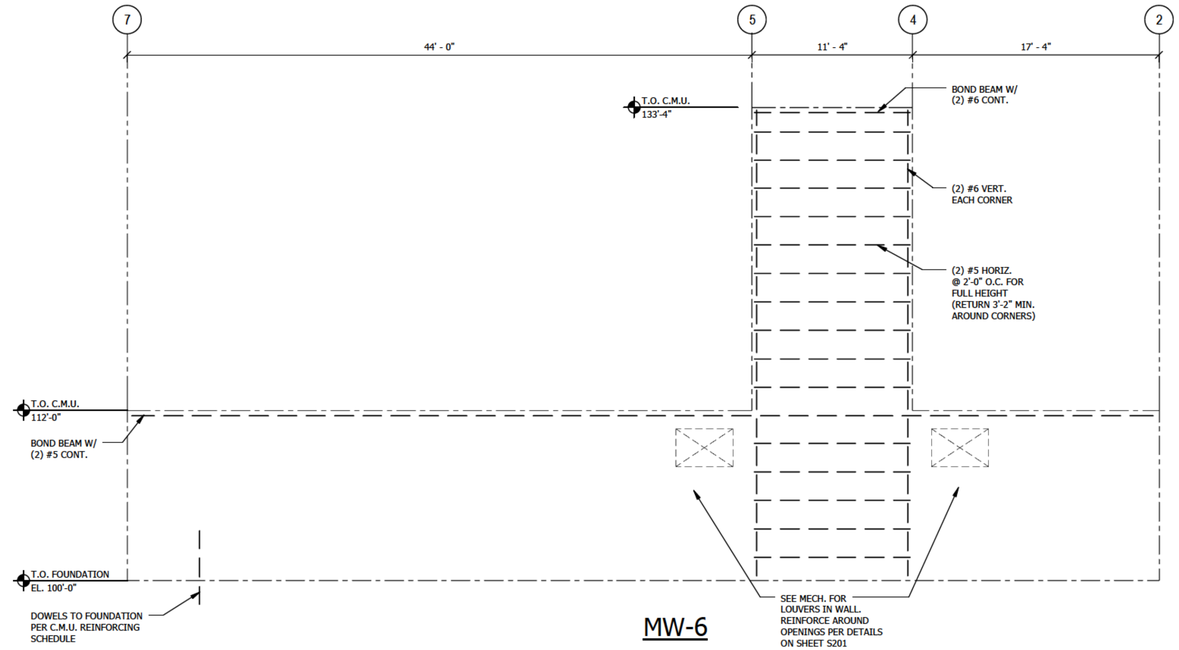

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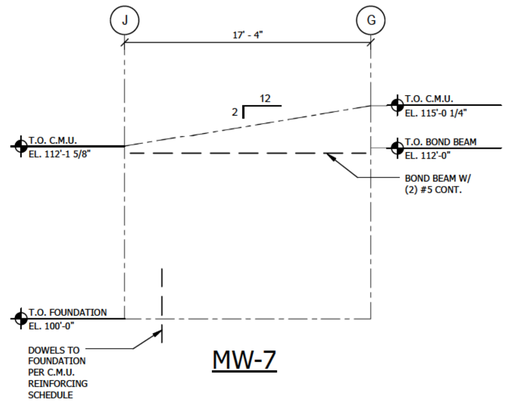

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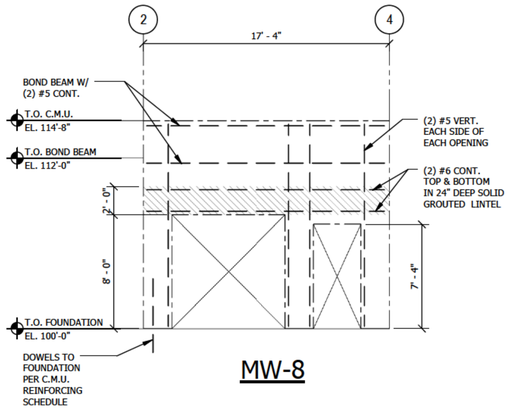

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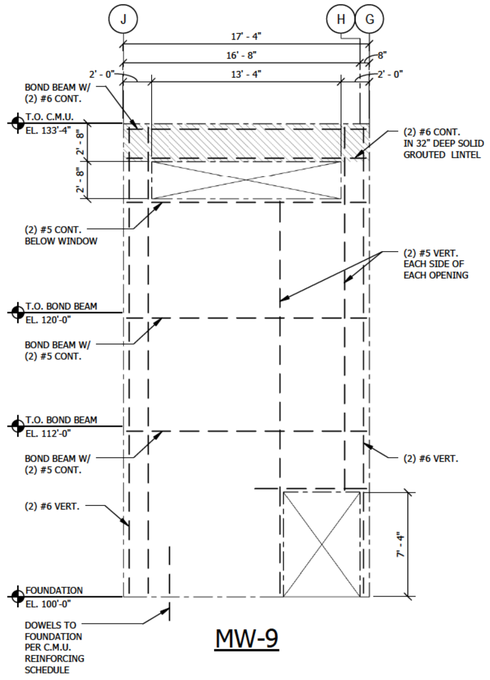

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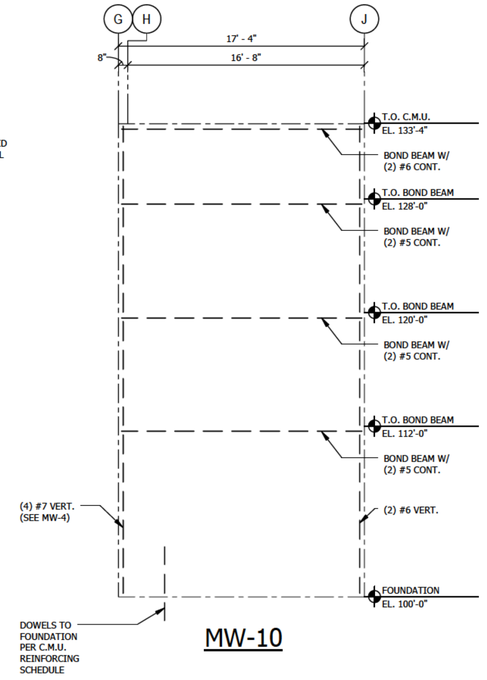

MW-10

MASONRY WALL ELEVATIONS

3/16" = 1'-0"

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

C.M.U. WALL ELEVATIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: **S203**

PROJECT NO: 14.108

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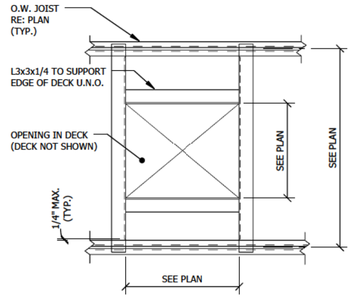
STEEL DECK SCHEDULE

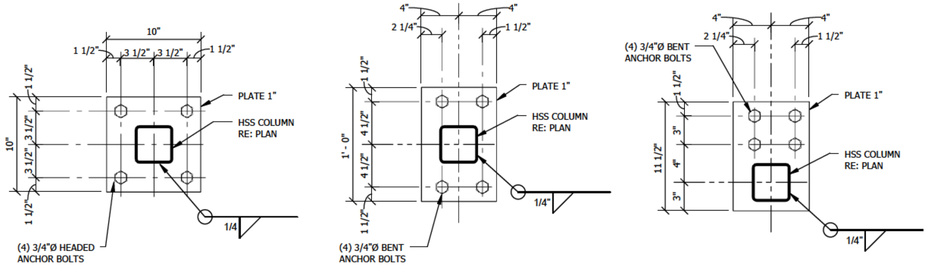
DECK				CONCRETE SLAB				DECK PROPERTIES (MINIMUMS)							FASTENERS		COMMENTS
DECK MARK	DECK TYPE	DECK DEPTH (in.)	DECK FINISH	CONC. ABOVE DECK (in.)	TOTAL THICKNESS (in.)	CONC. TYPE	SLAB REINF.	SPAN CONDITION	DECK GAUGE	MAX. CLEAR CONST. SPAN	INT. DECK BRG. (in.)	EXT. DECK BRG. (in.)	DECK DIAPHRAGM SHEAR (PLF)	SUPERIMPOSED LOAD CAPACITY (UNIFORM OR CONCENTRATED)	SUPPORTS	SIDE LAPS	
RD1	1.5B	1 1/2	SHOP PAINTED	--	--	--	--	1-2 SPAN	18	7'-8"	3	1 1/2	364	120 PSF	5/8" PUDDLE WELDS 36/4 PATTERN	(4) #10 TEK SCREWS EA. SPAN	ROOF DECK
								3 SPAN	18	8'-6"	3	1 1/2	364	120 PSF			
FD1	2C	2	GALVANIZED	4	6	NW	6x6-W2.9xW2.9	1-2 SPAN	18	10'-11"	3	1 1/2	--	300 PSF	5/8" PUDDLE WELDS EACH RIB	(4) #10 TEK SCREWS EA. SPAN	NON-COMPOSITE FORM DECK

NOTES:
1. SEE GENERAL NOTES FOR REQUIRED DECK MATERIALS.
2. DECK WITH HIGHER YIELD STRESS MAY BE USED WITH SP & SN REQUIRED VALUES ADJUSTED BY THE RATIO OF Fy(40)/Fy(PROVIDED).
3. ROOF DECK CAPACITIES ARE TOTAL LOADS AND ARE BASED UPON SUPPORT CENTER TO CENTER DIMENSION.
4. LAP EDGES AND ENDS OF ADJOINING W.W.F. SHEETS AT LEAST TWO MESH SPACINGS.
5. NO PERMANENT SUSPENDED LOADS ARE TO BE SUPPORTED BY THE STEEL DECK.



TYP. EDGE SUPPORT @ METAL ROOF DECK PEN.

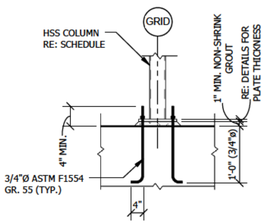
N.T.S.



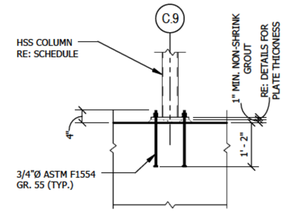
TYPE A TYPE B TYPE C

TYPICAL BASE PLATE DETAILS

1 1/2" = 1'-0"



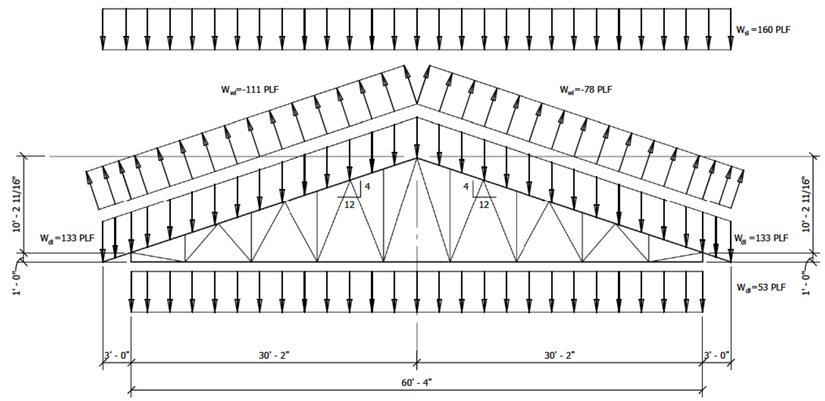
TYPICAL COLUMN ANCHOR BOLTS



EXTERIOR COLUMN ANCHOR BOLTS

TYPICAL ANCHOR BOLT DETAILS

1/2" = 1'-0"



RJ1

LH GABLE ROOF JOISTS

1/8" = 1'-0"

1. LOADS SHOWN ARE UNFACTORED LOADS.
2. LOAD DESIGNATIONS ARE THUS: W_{sl}=SNOW LOAD
   W_{dl}=DEAD LOAD
   W_{wl}=WIND LOAD (POSITIVE OR NAGATIVE INDICATES LOAD ACTING TOWARDS OR AWAY FROM THE ROOF, RESPECTIVELY)
3. WHERE WIND LOAD PRESSURE AWAY FROM THE ROOF EXCEEDS THE TOTAL DEAD LOAD, DESIGN JOISTS FOR NET UPLIFT.
4. DESIGN FOR WIND LOAD AS SHOWN AND WITH WIND LOADS REVERSED.
5. WEB CONFIGURATION IS APPROXIMATE. DESIGN AND LAYOUT OF WEB MEMEBERS SHALL BE BY JOIST MANUFACTURER.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

TYPICAL STEEL FRAMING DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG, KDN CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: S204

PROJECT NO: 14.108

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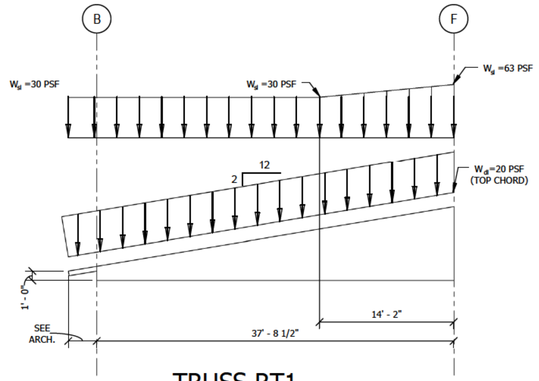
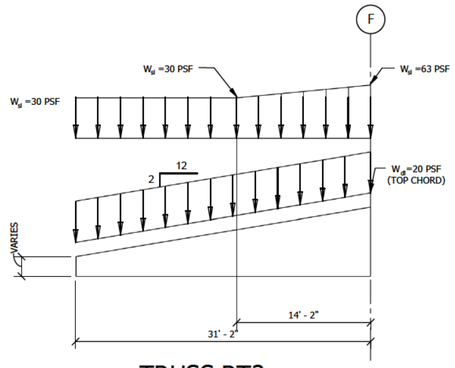


TRUSS RT1



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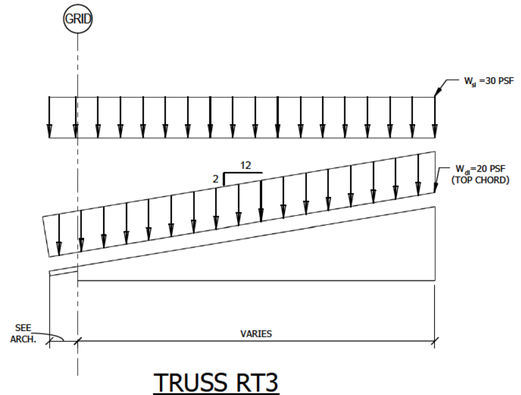
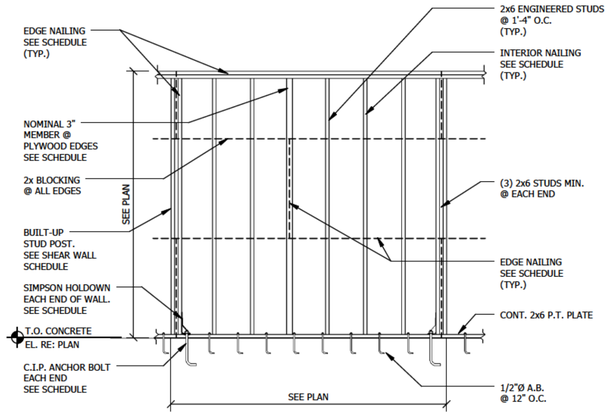


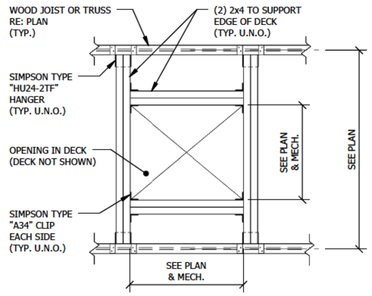
TRUSS RT3

WOOD ROOF TRUSS PROFILES & LOAD DIAGRAMS



TYPICAL SHEAR WALL ELEVATION 3/8"=1'-0"

1. NO OPENINGS ALLOWED IN SHEAR PANELS UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
2. ANCHOR BOLTS AT HOLDOWNS SHALL CONFORM TO ASTM F1554 GRADE 55.



TYP. EDGE SUPPORT @ PLYWOOD ROOF DECK PEN. N.T.S.

PROVIDE OPENING SUPPORTS FOR ALL ROOF PENETRATIONS 6"Ø AND LARGER.

PLYWOOD/SHEAR WALL NAILING SCHEDULE

USE		PLYWOOD THICKNESS	SPAN/INDEX RATIO	EDGE NAILING	INTERIOR NAILING	HOLD DOWN	HEADED ANCHOR BOLT
ROOF		19/32"	32/16	10d @ 4" O.C. (BOUNDARIES) 10d @ 6" O.C. (ALL OTHER EDGES)	10d @ 12" O.C.	--	--
WALL		15/32"	24/0	8d @ 6" O.C.	8d @ 12" O.C.	--	--
SHEAR WALL:	A	15/32"	24/0	10d @ 2" O.C.	10d @ 12" O.C.	"HD12"	1"Ø
	B	15/32"	24/0	10d @ 4" O.C.	10d @ 12" O.C.	"HD9B"	7/8"Ø

1. PLYWOOD FOR ROOFS, FLOORS, AND SHEAR WALL SHEATHING SHALL BE APA GRADE TRADEMARKED CDX W/ EXTERIOR GLUE. LAY UP PLYWOOD W/ FACE GRAIN PERPENDICULAR TO SUPPORTS AND STAGGER JOINTS. ALL NAILS SHALL BE COMMON NAILS; RING SHANKED FOR ROOF AND FLOOR SHEATHING. REFER TO TABLE ABOVE FOR USE REQUIREMENTS.
2. OSB SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD W/ PRIOR APPROVAL OF OWNER AND CONTRACTOR. OSB SHEATHING SHALL COMPLY WITH THE APA PLYWOOD DESIGN SPECIFICATION AND SHALL HAVE A SPAN RATING EQUIVALENT TO, OR BETTER, THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN 1/32") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES.
3. ALL EDGES OF ROOF SHEATHING SHALL BE BLOCKED WITH A 2" NOMINAL WOOD FRAMING MEMBER.
4. AT ABUTTING SHEAR WALL PANEL EDGES, STUDS SHALL BE NO LESS THAN A SINGLE 3" NOMINAL MEMBER AND NAILS SHALL BE STAGGERED.
5. PROVIDE (3) 2" NOMINAL STUDS AND HOLDOWNS AT EACH END OF SHEAR WALL.
6. HOLDOWNS LISTED ARE BY SIMPSON STRONG-TIE. ALTERNATES MUST BE EQUIVALENT AND MUST BE APPROVED BY THE STRUCTURAL ENGINEER.
7. HEADED ANCHOR BOLTS AT HOLDOWNS SHALL CONFORM TO ASTM F1554 GRADE 55. ANCHORS SHALL HAVE A MINIMUM EMBEDMENT OF 2'-0" AND SHALL HAVE A MINIMUM PROJECTION OF 6".

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

TYPICAL WOOD FRAMING DETAILS

NO: ISSUED FOR: DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KDN CHECKED BY: JAD

DATE: 04/10/15 SHEET NO: S205

PROJECT NO: 14.108

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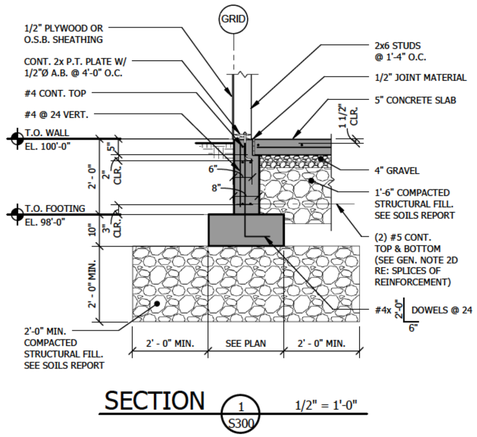
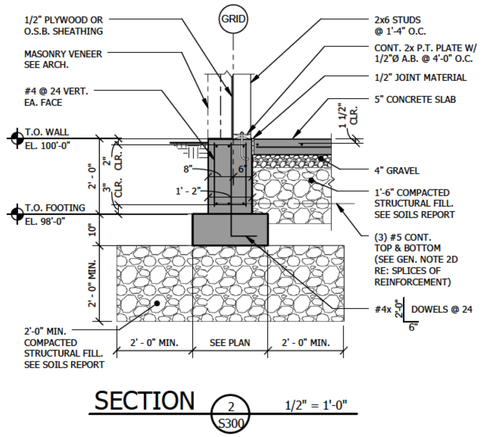


SECTION 1 S300 1/2" = 1'-0"



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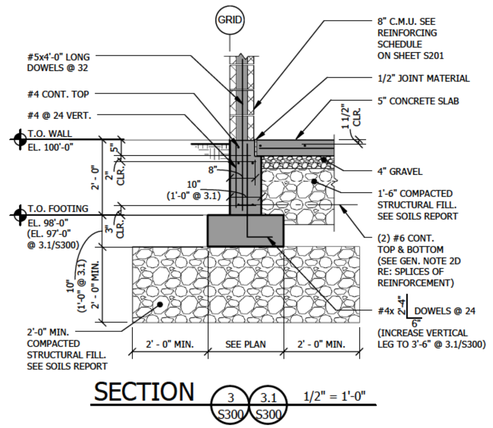
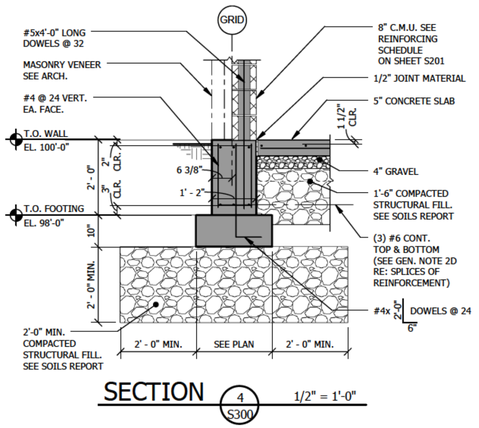


SECTION 3 S300 3.1 S300 1/2" = 1'-0"



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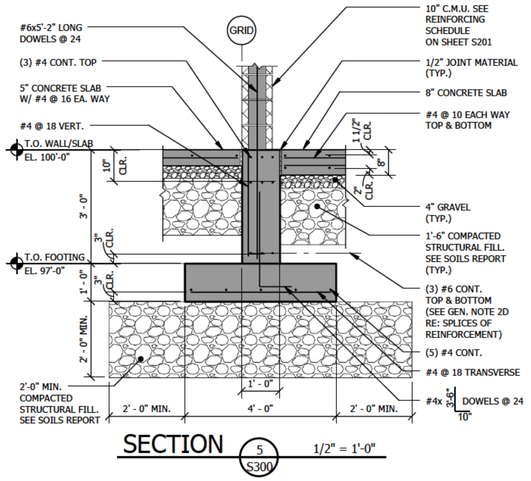

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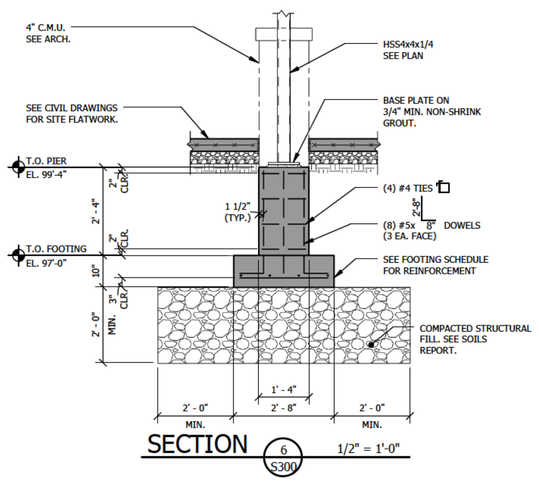

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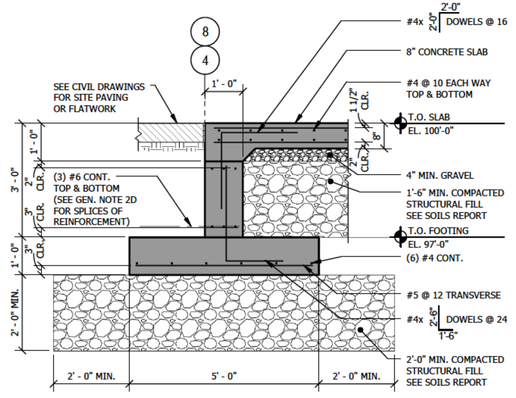

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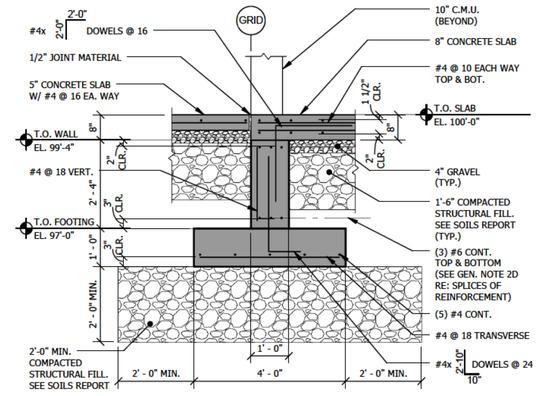

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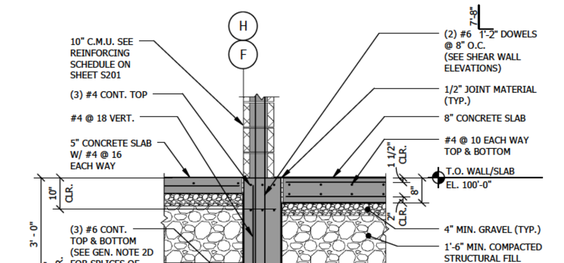

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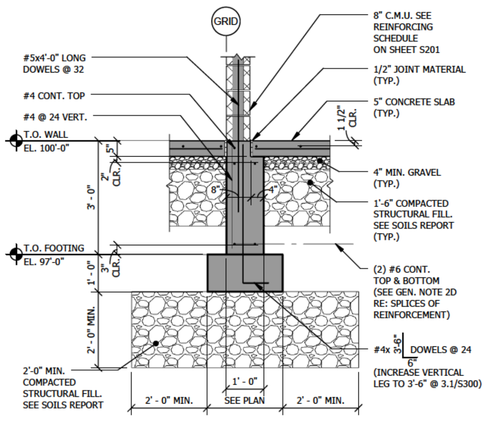

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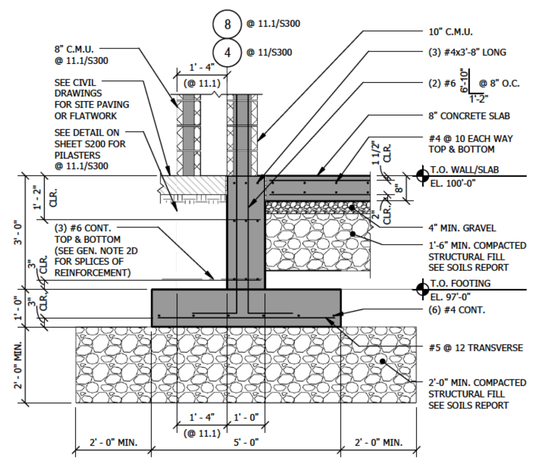
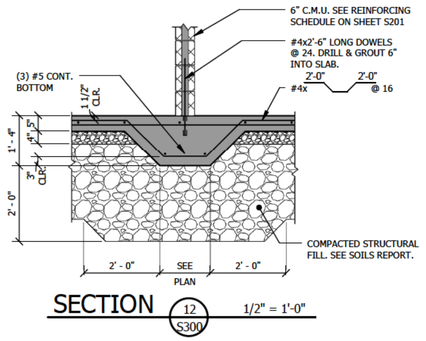


SECTION 11 S300 11.1 S300 1/2" = 1'-0"



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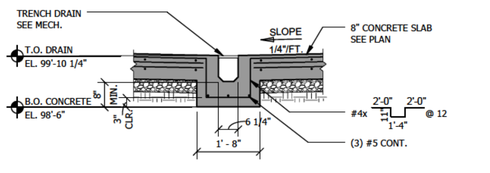

SECTION 13 S300 1/2" = 1'-0"

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FOUNDATION SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG CHECKED BY: JAD

DATE: 04/10/15 SHEET NO:

PROJECT NO: 14.108 **S300**

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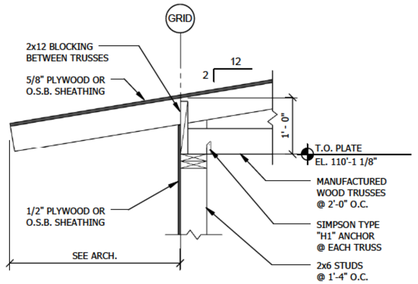
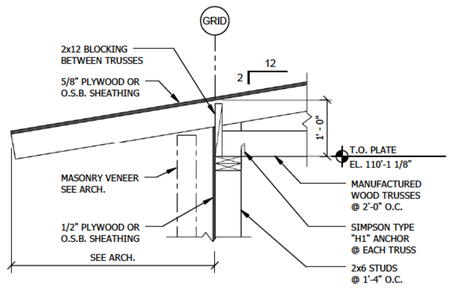


SECTION 1 S301 3/4" = 1'-0"



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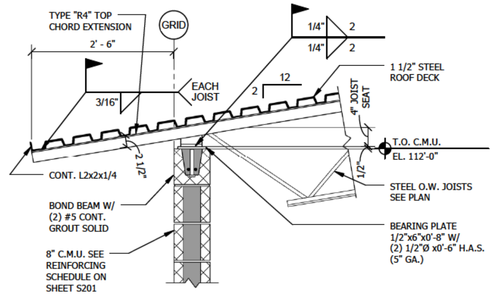

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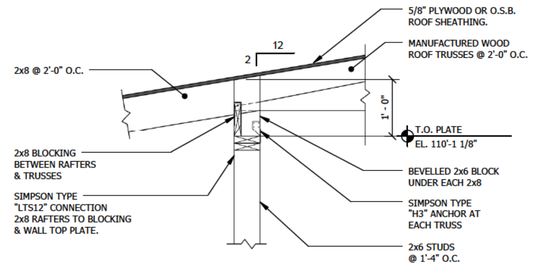

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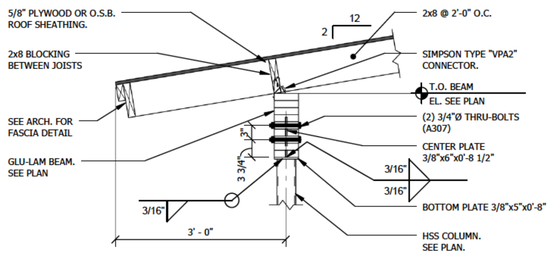

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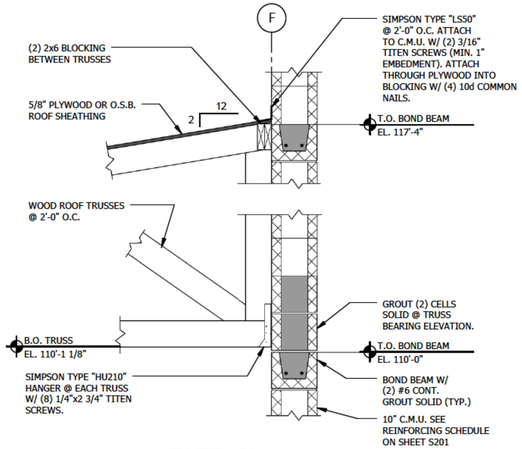

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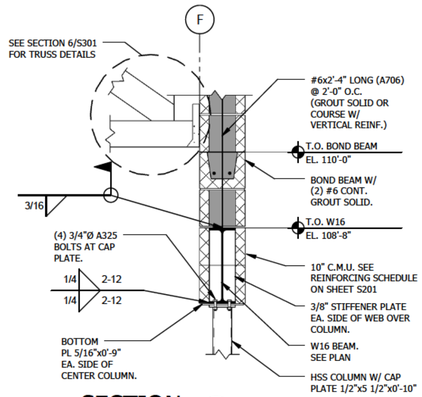
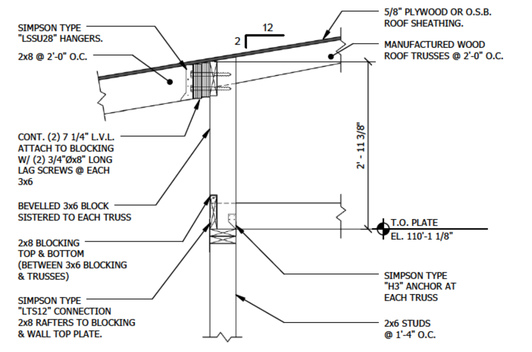


SECTION 7 S301 3/4" = 1'-0"



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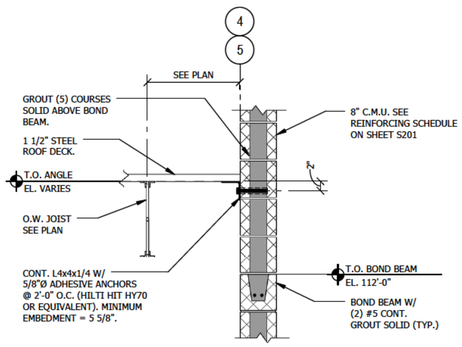

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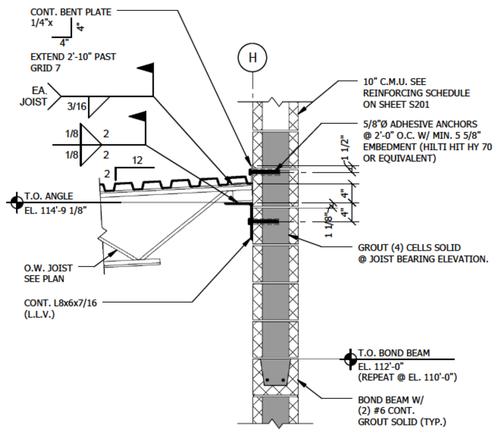

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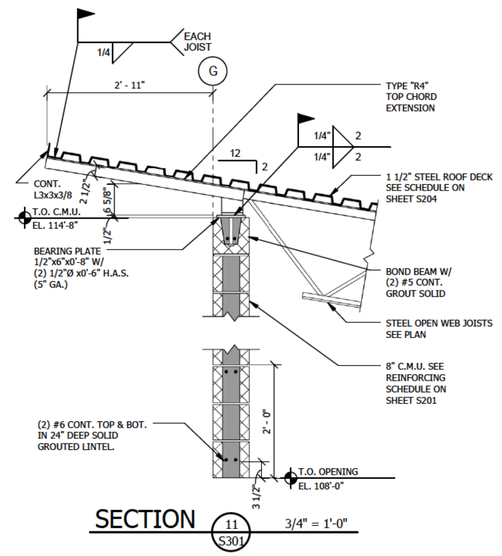

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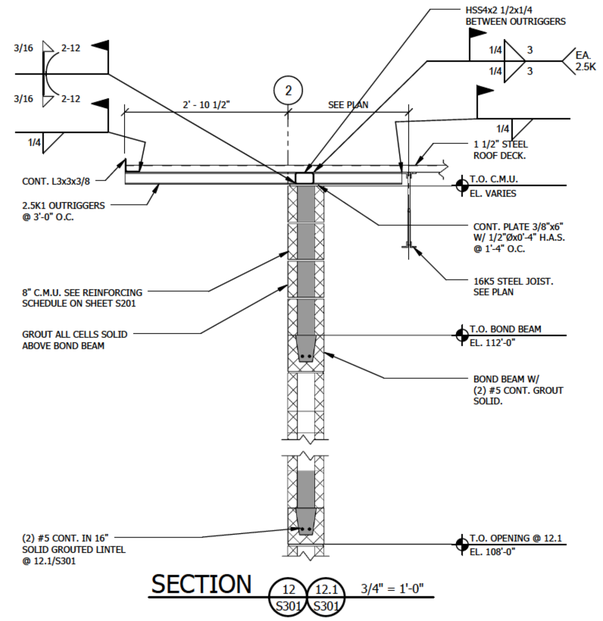

SECTION 12 S301 12.1 S301 3/4" = 1'-0"

TS3 1/2"x2 1/2"x 1/4" ok RFI 017

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FRAMING SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KDN CHECKED BY: JAD

DATE: 04/10/15

SHEET NO: S301

PROJECT NO: 14.108

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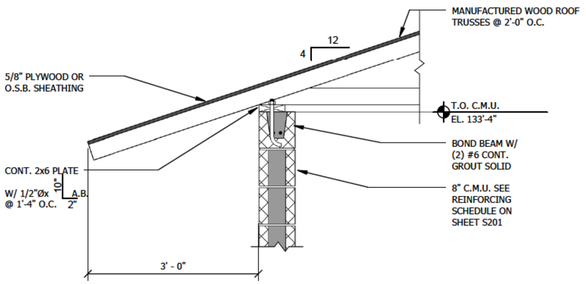
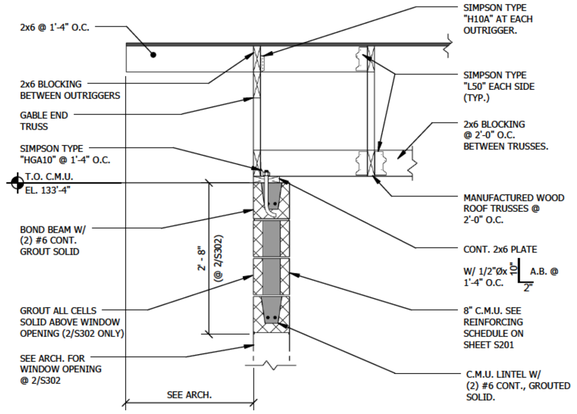


SECTION 1 S302 3/4" = 1'-0"



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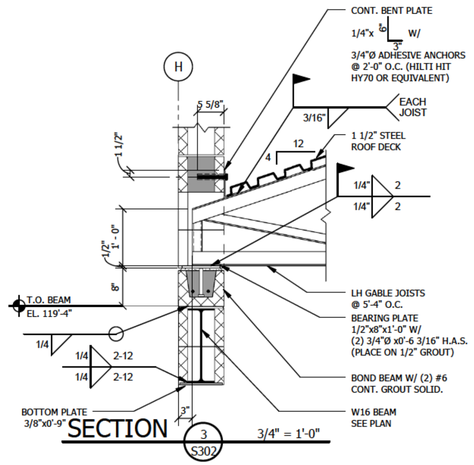

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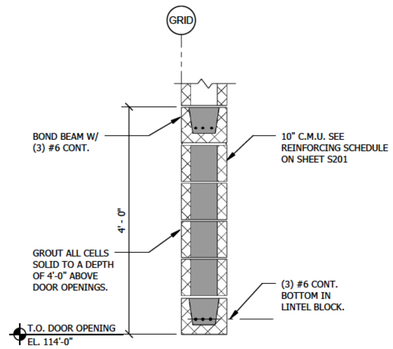

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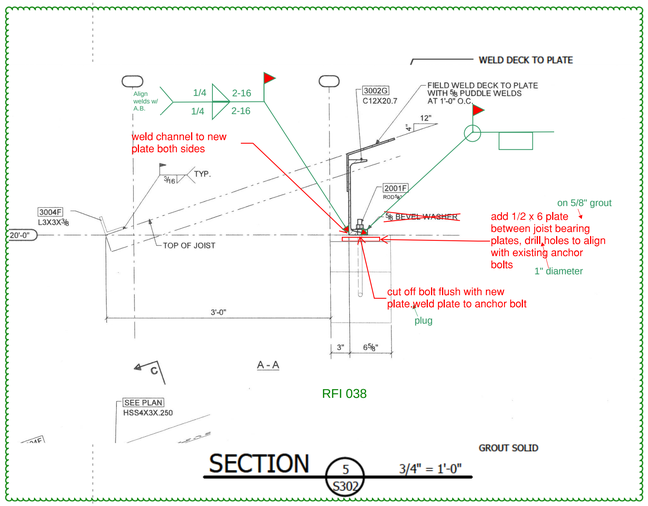

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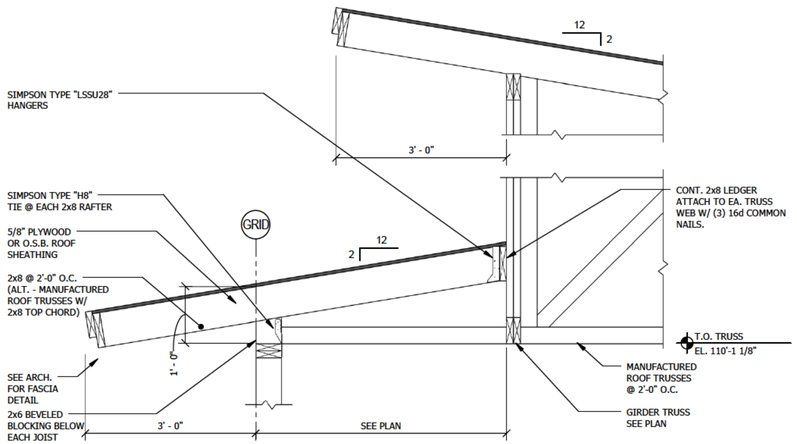

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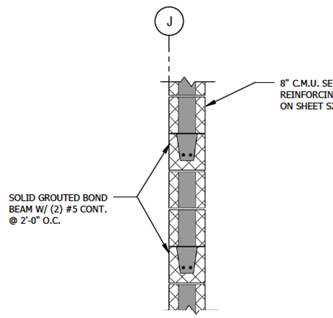

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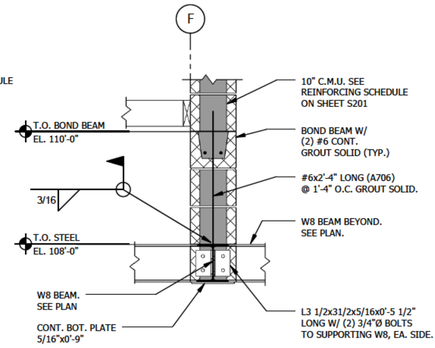

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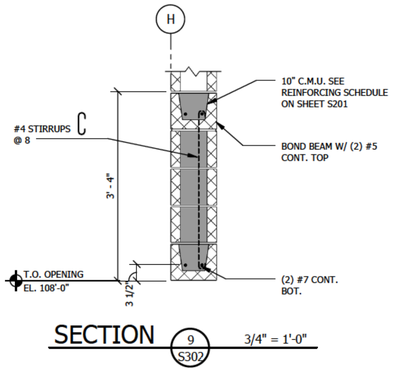

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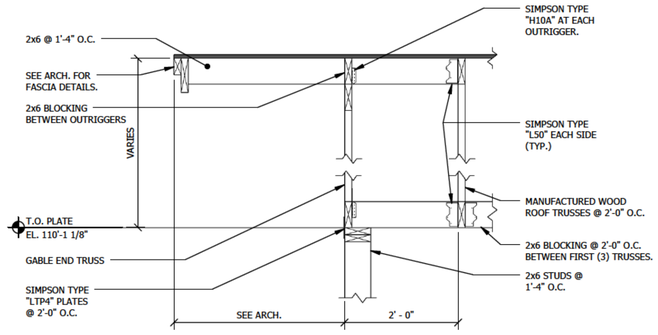
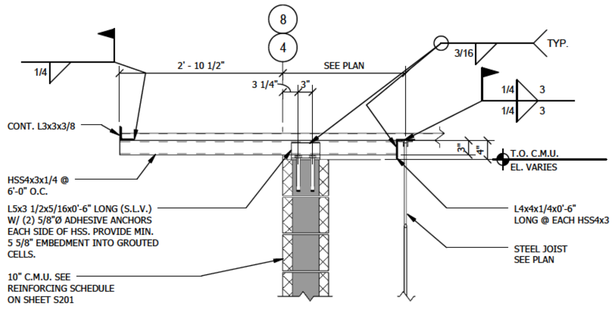


SECTION 10 S302 3/4" = 1'-0"



SECTION 11 S302 3/4" = 1'-0"

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FRAMING SECTIONS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: JDG, KDN CHECKED BY: JAD

DATE: 04/10/15

SHEET NO: S302

PROJECT NO: 14.108

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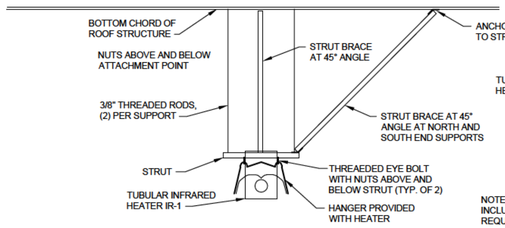
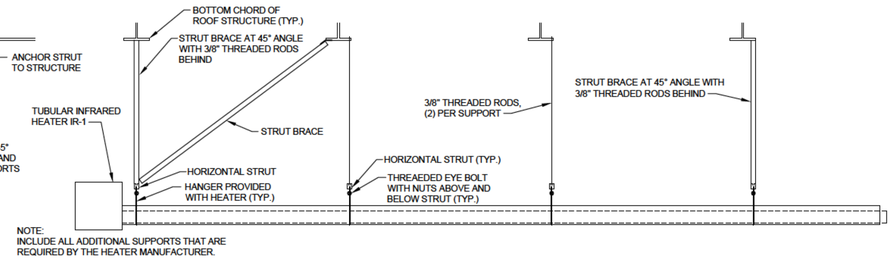


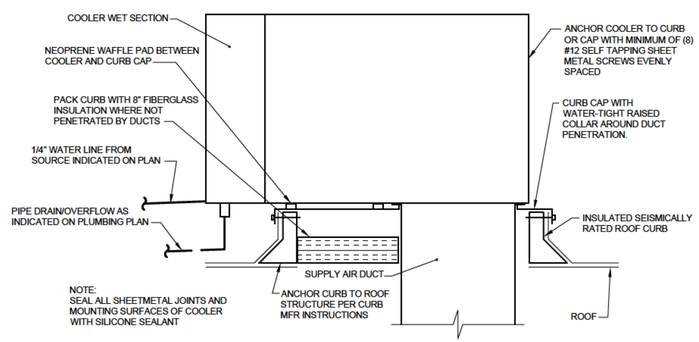
TUBULAR INFRARED HEATER SUPPORT DETAIL SOUTH ELEVATION

SCALE: 1/2" = 1'-0"



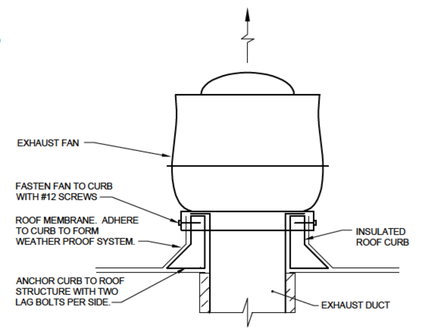
TUBULAR INFRARED HEATER SUPPORT DETAIL EAST ELEVATION

SCALE: 1/2" = 1'-0"



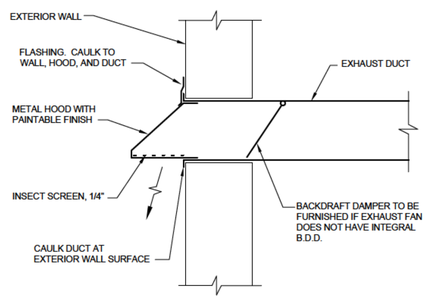
EVAPORATIVE COOLER MOUNTING DETAIL (BASE BID)

NO SCALE



ROOF MOUNTED EXHAUST FAN DETAIL

NO SCALE



EXHAUST WALL JACK DETAIL

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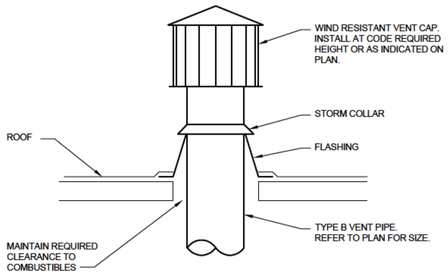

COMBUSTION VENT THROUGH ROOF DETAIL

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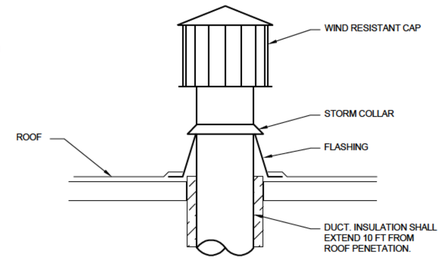
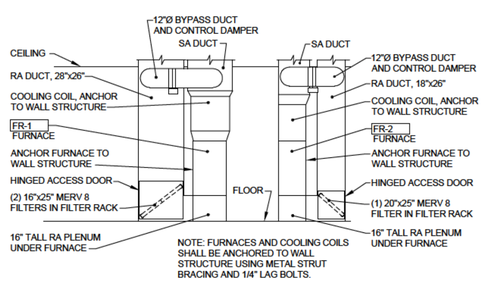


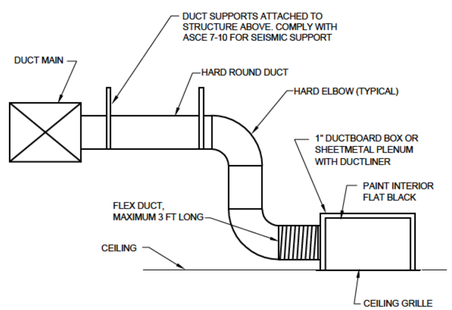
COMBUSTION AIR INTAKE AND GENERAL EXHAUST THROUGH ROOF DETAIL

NO SCALE



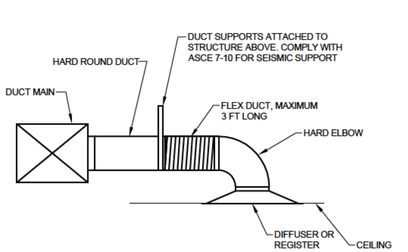
FURNACE DUCT AND FILTER INSTALLATION DETAIL

SCALE: 1/4" = 1'-0"



BRANCH RETURN DUCT AND CEILING GRILLE INSTALLATION DETAIL

NO SCALE



BRANCH SUPPLY DUCT INSTALLATION DETAIL

NO SCALE

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

MECHNICAL DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015

PROJECT NO: 1443

SHEET NO: M301

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4/13/2015 2:16:05 PM
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4/13/2015 2:16:05 PM

GENERAL NOTES

THE MECHANICAL CONTENT OF THIS DRAWING IS DIAGRAMMATIC AND NOT NECESSARILY TO SCALE.

THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO LOCATIONS OF DUCTWORK, EQUIPMENT, PIPING, AND SUPPORTS IN ORDER TO COORDINATE WITH BUILDING CONSTRUCTION AND WORK OF OTHER TRADES.

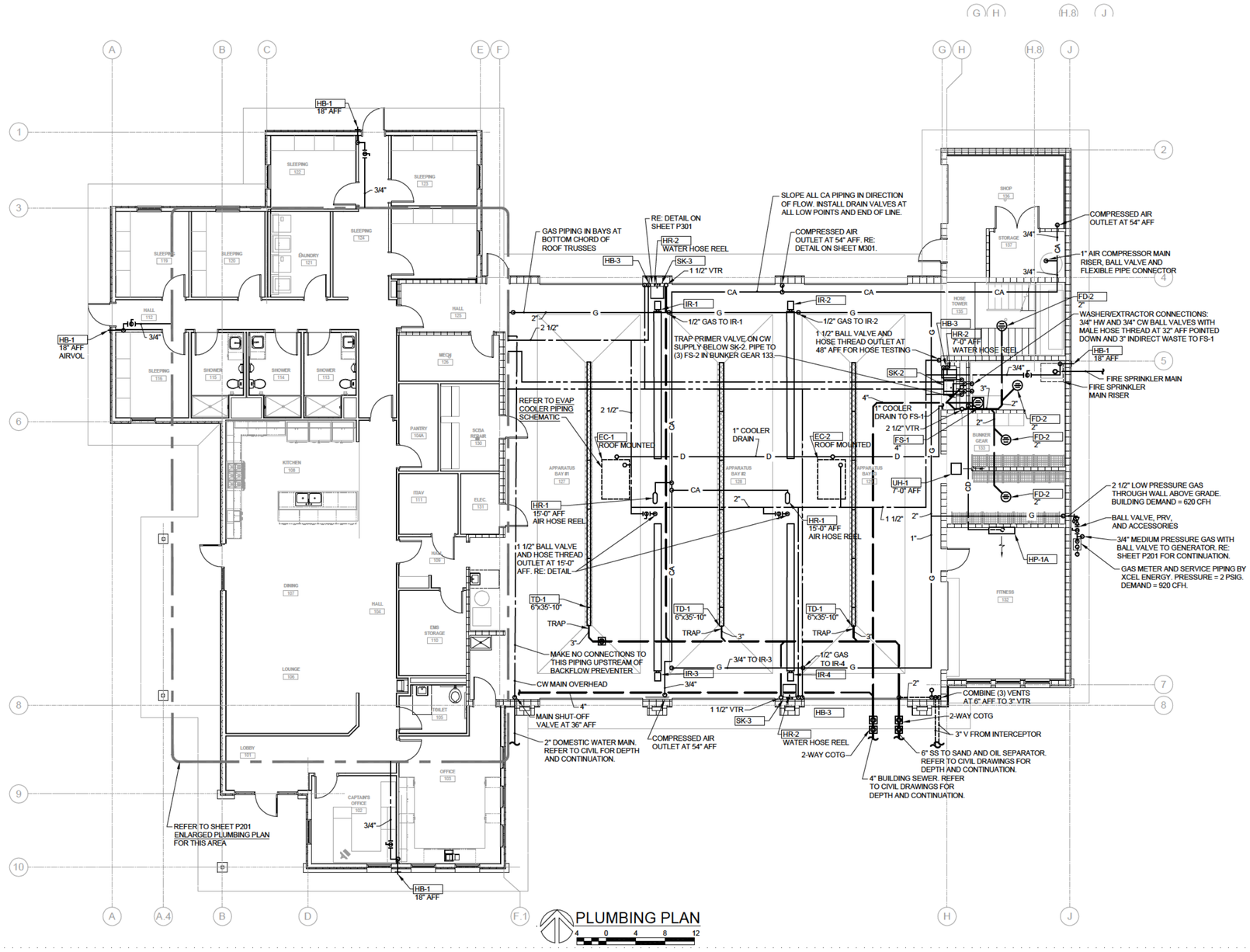
REFER TO SCHEDULES AND SPECIFICATIONS FOR EQUIPMENT AND MATERIALS OF CONSTRUCTION.

INSTALL WASTE PIPING CLEANOUTS WHERE INDICATED AND AS REQUIRED BY 2012 INTERNATIONAL PLUMBING CODE.

WATER PIPING SHALL BE INSTALLED TIGHT TO BOTTOM CHORD OF ROOF TRUSSES AND MUST BE COORDINATED WITH DUCTWORK INSTALLATION DUE TO SEVERELY LIMITED SPACE ABOVE CEILINGS.

EQUIPMENT AND PIPING SHALL BE SUPPORTED AND BRACED IN COMPLIANCE WITH ASCE STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

ALL HORIZONTAL PIPING IN APPARATUS BAYS SHALL BE SUPPORTED AT UNDERSIDE OF ROOF STRUCTURE USING METAL STRUT AND PIPING CLAMPS. PROVIDE SHIMS TO ACHIEVE PROPER SLOPE.



PLUMBING PLAN

4 0 4 8 12

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

PLUMBING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015

SHEET NO: P101

PROJECT NO: 1443

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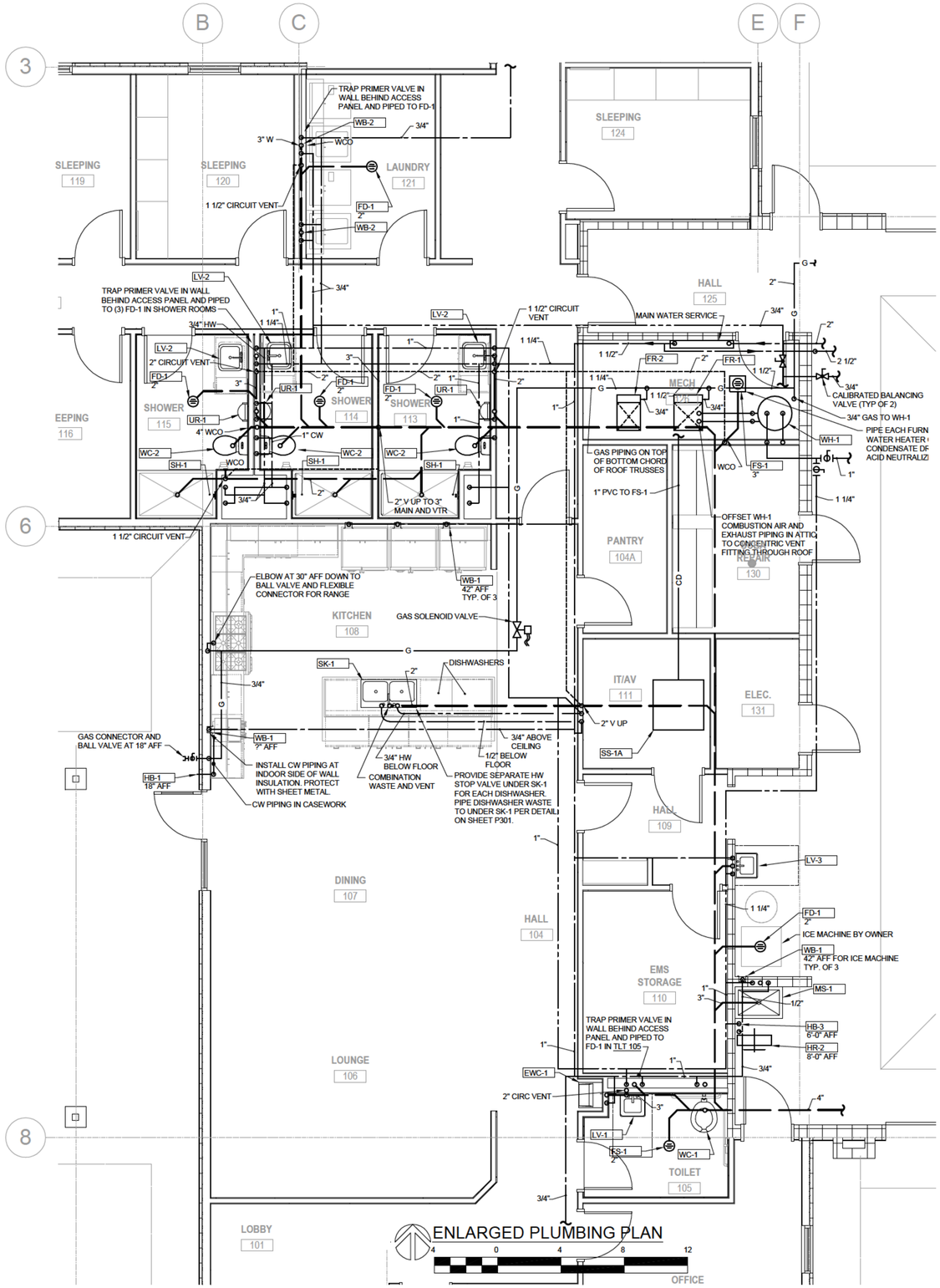

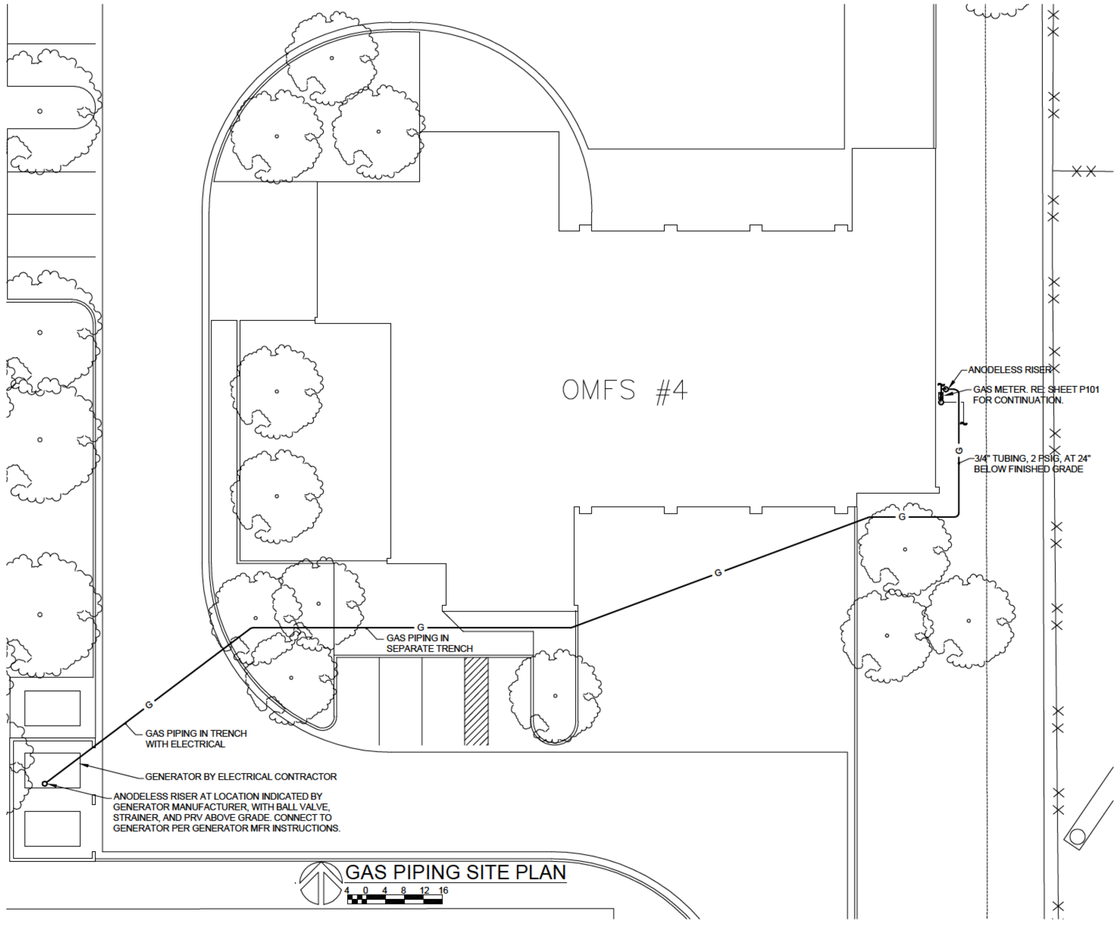

GENERAL NOTES

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REFER TO SCHEDULES AND SPECIFICATIONS FOR EQUIPMENT AND MATERIALS OF CONSTRUCTION.

INSTALL WASTE PIPING CLEANOUTS WHERE INDICATED AND AS REQUIRED BY 2012 INTERNATIONAL PLUMBING CODE.

WATER PIPING SHALL BE INSTALLED TIGHT TO BOTTOM CHORD OF ROOF TRUSSES AND MUST BE COORDINATED WITH DUCTWORK INSTALLATION DUE TO SEVERELY LIMITED SPACE ABOVE CEILINGS.

EQUIPMENT AND PIPING SHALL BE SUPPORTED AND BRACED IN COMPLIANCE WITH ASCE STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

ALL OVERHEAD HORIZONTAL PIPING GAS PIPING SHALL BE IN ATTIC AND SHALL BE SUPPORTED FROM ROOF STRUCTURE USING METAL STRUT AND PIPING CLAMPS.

ALL OVERHEAD HORIZONTAL WATER PIPING SHALL BE SUPPORTED AT UNDERSIDE OF ROOF STRUCTURE USING METAL STRUT AND PIPING CLAMPS.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

ENLARGED PLUMBING PLAN AND GAS PIPING SITE PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015 SHEET NO: P201

PROJECT NO: 1443

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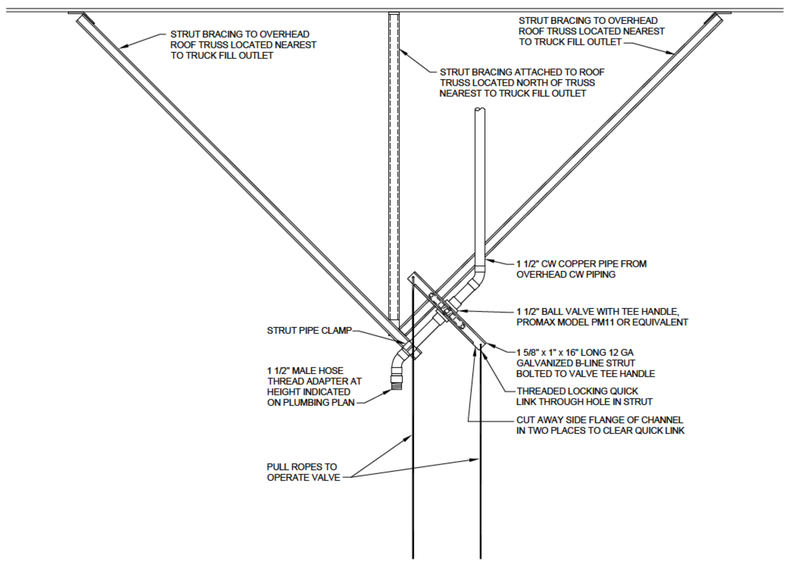
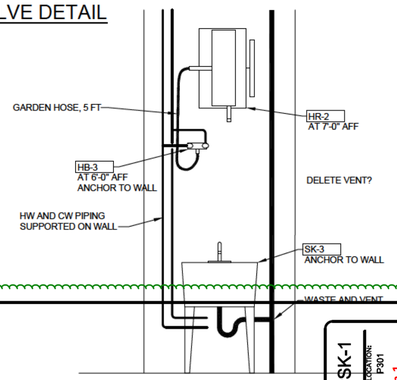


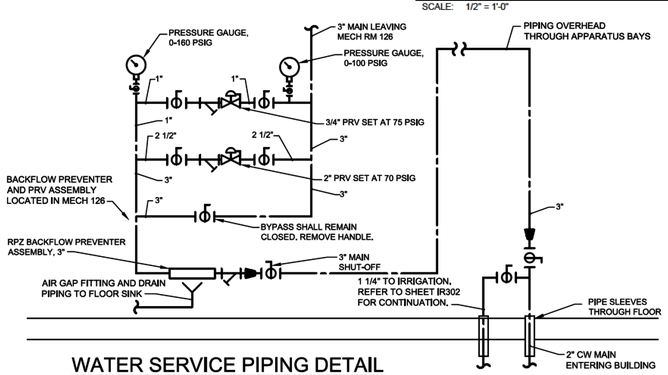
TRUCK FILL WATER VALVE DETAIL

SCALE: 1" = 1'-0"



SK-3 AND HR-2 PIPING DETAIL

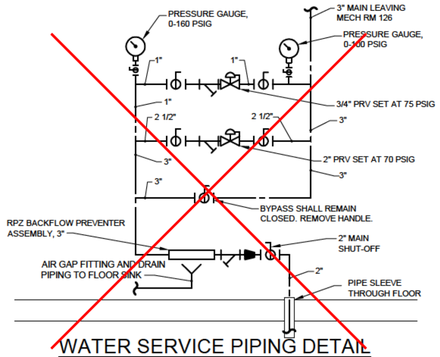
SCALE: 1/2" = 1'-0"



WATER SERVICE PIPING DETAIL

NO SCALE

PSK-1
LOCATIONS: P301
ISSUED WITH ADDENDUM 1 — Addendum 1
DESCRIPTION: REVISED WATER SERVICE PIPING DETAIL
DATE: 4/24/2015
PREPARED BY: DCR
SCALE: NO SCALE
PROJECT NO: 1443
CHAMBERLIN ARCHITECTS — GRAND JUNCTION, COLORADO — GRAND JUNCTION, SOUTH DAKOTA — RAPID CITY, SOUTH DAKOTA
ORCHARD MESA FIRE STATION #4



WATER SERVICE PIPING DETAIL

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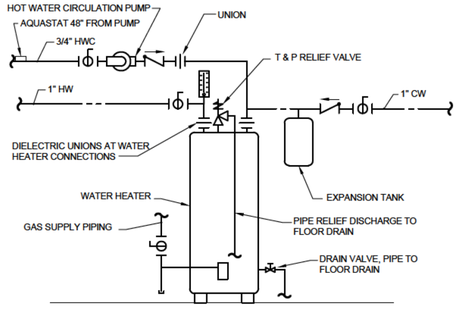
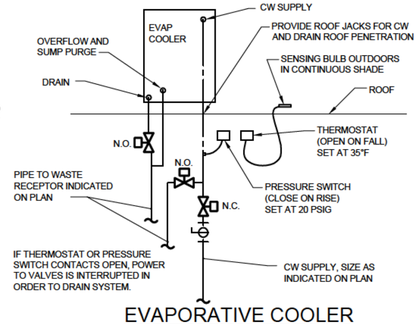


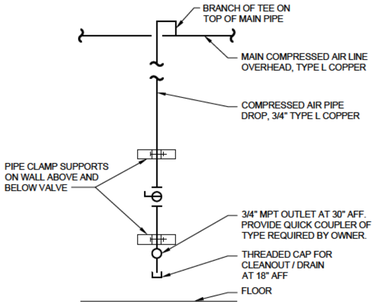
GAS WATER HEATER PIPING DETAIL

NO SCALE



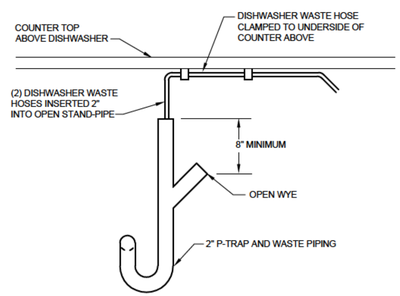
EVAPORATIVE COOLER PIPING SCHEMATIC

NO SCALE



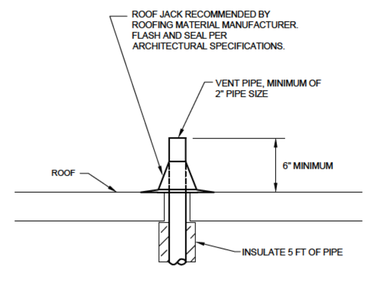
COMPRESSED AIR DROP DETAIL

NO SCALE



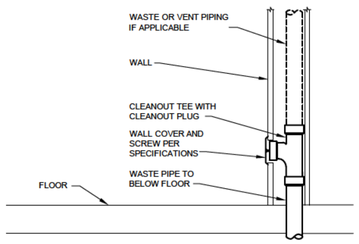
DISHWASHER WASTE CONNECTION DETAIL

NO SCALE

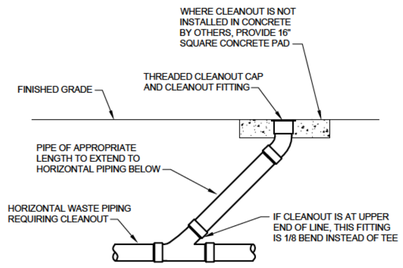


VENT THROUGH ROOF DETAIL

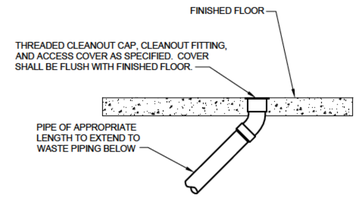
NO SCALE



WALL CLEANOUT (W.C.O.) DETAIL



CLEANOUT TO GRADE (C.O.T.G.) DETAIL



FLOOR CLEANOUT (F.C.O.) DETAIL

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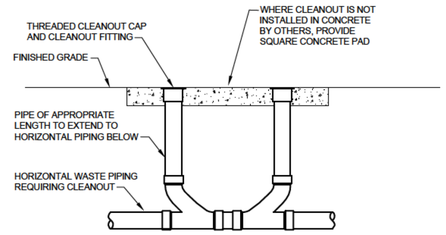

TWO-WAY CLEANOUT TO GRADE DETAIL

NO SCALE

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PHONE 970-434-9819 / FAX 970-434-9815 / CELL 970-260-1781 / dbralston@msn.com

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

PLUMBING DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015 SHEET NO: P301

PROJECT NO: 1443

2012 CHAMBERLIN ARCHITECTS

CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 1

DATE: **September 25, 2019**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Offerors**
RE: **City of Grand Junction Fire Station #6 CM/GC RFP-4703-19-DH**

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. For Contractor's review, please see the attached additional information derived from the solicitation process to hire the architect assigned to the project (Chamberlin Architects).

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

Specifications/Scope of Services:

Primary Areas:

- Residential Space
- Office Space
- Public Space
- Fire Equipment Storage and Maintenance Space
- Apparatus Storage Space
- Department Special Equipment Storage (throughout facility).

Residential Space:

- Dayroom to accommodate 8-10 personnel.
- Kitchen with three (3) separate food storage lockers (min. 28 cu. ft. ea.) and provisions for three (3) refrigerators (min. 22 cu. ft. ea.), two (2) microwaves, one (1) dishwasher, and one (1) gas stove.
- Dining area sufficient in size for 8-10 personnel
- Eight (8) individual bedrooms each with: 3 clothing lockers (min. 44 cu. ft. ea.), cable service, phone service and computer connections with sufficient space for a desk.
- Minimum of three (3) individual restrooms with one (1) shower, one (1) sink, one (1) toilet, and one (1) urinal in each.
- Laundry room with washer and dryer hookups, a utility sink, and storage for laundry supplies. (2 washer/dryer sets preferred)

Office Space:

- Office #1 with individual work space for 4 fire personnel, each with a computer, 1-2 shared desk phones and 1 shared printer/fax/copier unit.
- Office #2 is a private office with work space for 1 fire Captain with a desk phone, computer and printer.
- Office #3 is a private office with work space for 1 fire Battalion Chief with a desk, phone, computer, and printer.

Public Space:

- One (1) public unisex restroom.
- Space for a drinking fountain.

Fire Fighter and Equipment Storage/Maintenance Space:

- Shop area.
- SCBA compressor room with 208v 3-phase electrical power.
- Bunker storage and cleaning area (28 bunker set minimum).
- Physical fitness room.
- Hose cleaning, drying and storage area. A hose tower is preferred for drying hose.
- EMS storage area
- General supplies storage area.

Fire Apparatus Storage Space:

- Three (3) drive-through bays (minimum - 60 feet long) with full length floor trench drains in each.

- Apparatus exhaust system, AIRVAC 911 Exhaust Removal System.
- Infrared radiant heat throughout.
- Three (3) phase electrical power (208 volt) supply for air trailer.
- Six (6) ceiling mounted, retractable, compressed air cord reels (copper piped to fixed compressor).
- Six (6) ceiling mounted, retractable, electric cord reels.
- Two (2) ceiling mounted, 2" cold water outlets with shut-off valves.

Miscellaneous Equipment Space (located in various locations throughout the facility):

- Emergency generator.
- Industrial capacity, stationary air compressor.
- SCBA compressor
- Bunker gear extraction washer.
- Hose washer.
- Hose racks.
- Radio antenna.
- Communication line. Fiber optic preferred.
- First In station alerting system.
- Flag pole.
- Information Technology (IT) room (minimum 8 ft. x 8 ft.)
- Fire sprinkler system.
- Employee parking
- Public parking
- Dumpster enclosure

The architectural firm awarded as a result of this RFP and subsequent proposal shall:

- Based off of previously developed Fire Station #4 plans, drawings, scope, and specifications, prepare all necessary plans, drawings, scope, and specifications for the construction of Fire Station #6 facility to include site and utility infrastructure.

- Accomplish and prepare required reports for survey and testing.

- Site/utility planning and design.

- Building design and engineering.

- Develop layout and flow of facility in collaboration with the City Fire Department team.

- On-site inspection of engineered features.

- Assurance of specification compliance.

- Participate with the City Fire Department, Public Works Department, Community Development Department, and the selected Construction Management Firm to facilitate required public hearings and neighborhood meetings as a part of the zoning and permit process. In addition, neighborhood stakeholder meetings may be held throughout the process to insure the neighboring community is kept informed of the process.

- All construction drawings shall be stamped by a professional architect, registered in the State of Colorado.

- Assist the City in the development of the Invitation for Bid (IFB) for release to the public after Construction Documents have been completed, including attendance at the pre-bid meeting, answering contractor's questions, and reviewing IFB responses.

- The Architectural Firm awarded as a result of this RFP process will be required to fully collaborate with the City Project Manager, City Fire Department Team, and the selected Construction Management Firm. They shall insure the final design and construction of the facility complies with the requirements of the Fire Department, and City of Grand Junction conditions, covenants and restrictions. The City shall require maximum collaboration by the Design Firm and the Construction Management Firm to insure value engineering through constructability assessments during the preconstruction phase as well as the construction phase of the project.

- All finalized drawings, plans, scope, specifications (both hard copy and electronic, to include CAD versions), shall become the property of the City.

The City of Grand Junction shall provide:

- Apply for and coordinate all City required permits, zoning changes, etc. including costs.

- Provide plans, drawings, scope, and specifications originally developed for Fire Station #4, which shall be the basis for development of plans, drawings, scope and specifications for Fire Station #6.

- Provide a base map of the property showing topographic contour, existing features, property pins, boundary survey, existing ditches, etc. as necessary to develop building site plan. Base map will be provided electronically in Auto Cad drawing format.

- Schedule any neighborhood meetings including facilitate public notices and mailings.

- Provide a list of mandatory station requirements and optional desires, such as:

    - Lengthen the apparatus bays to original Fire Station #4 design.
    - Dryer vent should exit through wall with shorter distance then through the ceiling.
    - Eight bedrooms to original Fire Station #4 design.
    - Expand PT room to original Fire Station design/Roll up door options.
    - Lower overall height of station to original Fires Station design.
    - Raise roof trusses over the "living" quarters to increase above ceiling space to run IT/AV cable.
    - Provide pathway between Hose Tower and IT Closet.
    - Provide masonry veneer at Hose Tower.
    - Increase slope at floor drains in apparatus bay.
    - Delete interior partitions around air compressor in Shop.

- Provide a decontamination sink on both sides of apparatus bays.
- Delete SCBA Room, not required.
- Delete lighting control panel.
- Provide one (1) additional office for future Battalion Chief.
- Rotate Lounge 90 degrees to accommodate recliners better.
- Landscape design shall not be a part of this contract.
- Add gutters to design.
- Redesign hose tower catwalk/beam.
- Add smoke removal system, AIRVAC 911 Exhaust Removal System.
- Add power for Air Trailer.

CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 1

DATE: July 12, 2019
FROM: City of Grand Junction Purchasing Division
TO: All Offerors
RE: Professional Architectural Services for Fire Station #6 RFP-4666-19-DH

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. Clarification for estimated square footage should be closer to 10,000 sqft.

2. Q. Will you be seeking commissioning services in the near future for this project?

   A. No.

3. Q. Are Mechanical Electrical and Plumbing Engineering required along with the Architectural set?

   A. Yes, the MEP engineering will be part of this RFP.

4. Q. Will the construction management solicitation for RFP-466-19-DH come out this year?

   A. It is anticipated that the bidding process for construction will take place prior to year's end.

5. Q. Will the design team have any role in the design, selection, coordination etc. of the art work?

   A. No.

6. Q. Will three-phase power be required for the air trailer or any other equipment?
   a. If so, will the City provide coordination with Xcel to bring three phase power to the site?

   A. Yes. Three-phase electric service will be required for Fire Station #6. The existing Fire #4 has the transformer and MDC for 120/208 3 phase power. This is shown on the drawings that were included with the solicitation documents. The City will work with the electric provider to bring the connection from the east side of 27 Road to the fire station site across the street. The electric utility in this area is Grand Valley Power.

7. Q. What is the design team's role in the City Planning / Land Use / Permitting process, if any?

a. Will we need to provide 100% civil engineering construction drawings prior to the rest of the CDs to expedite the planning process?
b. How many public meetings should we expect to attend? Who will schedule and organize those meetings?
c. Will we need to provide light density photometrics and/or other drawings specifically for the Planning process?
d. Can you provide a City Planning checklist and/or Pre-App meeting minutes defining the extent of our work?
e. Is the Design Team responsible for responding to Planning questions and comments?

A. The design team will provide a Drainage Report, General Project Report, an Elevation Certificate, and Composite plans as required by the Planning Code to assist with the application for the development permit.

a. Yes, 100% civil CDs may be needed prior to the rest of the CDs to move through the planning process quickly.
b. The Design Team selected for this project will not be required to attend any public meetings for Fire Station #6.
c. Please see the answer to question no. 27.
d. Please see the answer to question no. 27.
e. The design team should assist the City with any questions resulting from the planning permit process (e.g. any drawing changes required to satisfy the planning comments).

8. Q. Will the delivery method be Design/Bid/Build or CM/GC?

A. The intended delivery method is to be Design-Bid-Build.

9. Q. Please confirm the 8,500 sf estimated building size. FS #4 seemed larger than that and FS#6 will have an added office, larger bays, and more bedrooms.

A. Refer to item 1 of this addendum.

10. Q. Should we expect to modify the roof design/massing of the building?

A. The overall roof design/massing of Fire Station #4 will be used for Fire Station #6. Minor changes will occur due to the additions of bedrooms, an office and larger bays.

11. Q. Can you provide a list of the changes to the Fire Station #4 design?

A. See the list on page 17 of the RFP

12. Q. Will the Fire Station parcel be legally separated from the park parcel?

a. If so, will the design team have any role in creating that separation?

A. No to both.

13. Q. What are the boundaries of the Fire Station project "site" for our scope of work?

A. See attached graphic for the boundaries of the project site.

14. Q. What offsite work is the design team responsible for – any development of or in 27 Road?

a. Will the City provide all design services for the sanitary and storm sewer extensions?

b. Will work in the street ROW be part of the General Contractor's construction work?

A. The Design Team hired by the City will be responsible for the design of the sanitary sewer extension along 27 Road and into Pacific Dr. There is no storm sewer in this neighborhood. The design team would need to drain the fire station site into the adjacent borrow ditch along 27 Road.

15. Q. Will there be a traffic signal at 27 Road and, if so, will the design team be involved?

A. No.

16. Q. Should we expect to design any retaining walls?

A. No. The site can be graded to accommodate the project.

17. Q. What is the hard construction cost budget for the project?

A. The estimated construction cost for this project is $3.2 million.

18. Q. Are we responsible for providing a SWMP for the project?

A. No. The site is under one acre and will not require a SWMP.

19. Q. Will landscaping be part of the General Contractor's construction work?

A. The City shall have the design work for landscaping done as a separate City contract, and the construction work for the landscaping shall be the responsibility of the General Contractor.

20. Q. Are any photo-realistic renderings of either the interior or exterior required?

A. No.

21. Q. Until you get results of the geotechnical report, what should we assume for the foundations – deep or shallow, simple or complicated?

A. The City's Geotechnical Engineer expects there to be shale bedrock in this area. He will provide options for both a shallow foundation with 3 to 4 feet of over-excavation, and a deep foundation with micropiles or similar supports. The City will go with shallow foundations, unless there is a major concern for movement of the building.

22. Q. Should we include design of the FF&E package?

a. If so, does this include answering questions during bidding?

b. Does this include construction observation services?

A. Yes.

a. Yes.

b. Yes

23. Q. Are you expecting the architect to attend weekly construction phase meetings on site?

A. Yes.

24. Q. Are you expecting us to break down our fees by design phase? By discipline?

A. Yes to both.

25. Q. Do you want us to break out reimbursable costs for things like travel, meals, lodging, etc. separately in our proposal?

A. Yes (must be tied GSA rates). As stated in Section 4.2.2 Price/Fees: … Provide a not to exceed cost using Solicitation Response Form found in Section 7, accompanied by a complete list of costs breakdown.

26. Q. Are you expecting us to provide Revit as-builts?

A. No, Autocad drawings will be suitable for as-builts.

27. Q. Will the City obtain the curb-cut and other planning clearance permits?

A. The City will obtain the Development Permit from the City Planning Department, but the Architect can plan on providing a Drainage Report, General Project Report, an Elevation Certificate, and Composite plans as required by the Planning Code to assist with the Development Permit application.

28. Q. Will the entire site need to be considered for drainage, or just the development for the fire station?

A. Only the disturbed area of the site to build the new fire station will need to be considered for drainage. This area is less than an acre, so a stormwater construction permit will not be required. Drainage from the building and the impervious pavement will need to flow to the existing stormwater conveyance.

29. Q. Will a sidewalk need to be provided as part of the fire station project? (Currently there is no sidewalk or curb and gutter, just a 4 foot wide shoulder.)

A. Yes, a detached sidewalk will be required in front of the fire station, along with curb and gutter per City Planning and the Active Transportation Plan.

30. Q. Where is the nearest sanitary sewer for connection, and what kind of connection will be required for the new fire station (main line vs service line)?

A. The nearest sanitary sewer is in Pacific Drive, about 430 feet from the City property. The connection will be a main line for the fire station and possible future use in the park.

31. Q. Where is the nearest communications connection, and will the consultant be required to provide this connection (or will the City provide it)?

A. The nearest City fiber optic line is at 27 Road and North Avenue. City shall determine the appropriate communication link for the site. The consultant shall need to plan for the independent pathways to the property line from the facility for Century Link, Charter, and City Services.

32. Q. Where is the nearest storm sewer connection?

A. At the corner of 27 Road and Twelfth Court, about 1,000 feet south of the City property. The existing borrow ditch on the east side of 27 Road may be used to convey the proposed drainage from the new fire station.

33. Q. Are there any legal issues with the property lines on the south side of the site?

A. The City is not aware of any legal disputes with respect to the property lines.

34. Q. Will 3-phase electric service be required for the fire station?

A. Yes. Three-phase electric service will be required for Fire Station #6. The City will work with the electric provider to bring the connection from the east side of 27 Road to the fire station site across the street. The existing Fire #4 has the transformer and MDC for 120/208 3 phase power. This is shown on the drawings that were included with the solicitation documents. The electric utility in this area is Grand Valley Power.

35. Q. Pertaining to communication antennas on the hose tower, will the tower need to be modified to accommodate antennas, and what kind of antennas are anticipated and how will they be mounted?

A. There will be an 800 MHz radio antenna (small stick antenna) that will be mounted to the hose tower. There <u>may</u> be the need for a microwave tower and the consultant will need to determine an appropriate ground location for the tower site. Once the ground site is determined, a City hired radio consultant will need to determine the appropriate type of radio to wer for a microwave link.

36. Q. Does the appropriated $5.6 million include land costs and soft costs? Or are the land costs not included in that number?

A. The estimated construction cost for this project is $3.2 million. The City owns the property that the new fire station will be located.

37. Q. The RFP requests a footprint of 8,500 sq.ft. but during the site visit it was indicated that there is a need for two additional dorm rooms and an office. Do those new spaces need to stay within the noted footprint, or can additional square footage be added to accommodate this need?

A. See line item 1 of this addendum.

38. Q. It is our understanding that plans for fire station 4 will be given to the awarded vendor to access. Is this correct and in what format will the plans be provided?

A. This is correct. The winning design team will receive the digital drawings of Fire Station #4 in AutoCAD format.

39. Q. It is our understanding that you have no defined page count or proposal document setup requirements other than the content requirements laid out in the RFP on page 18. Is that correct and are proposals in 11X17 format acceptable?

A. That is correct, and 11x17 format is acceptable.

40. Q. What is the anticipated budget?

A. Reference item 36 of this addendum.

41. Q. In section E, we are to include the form in section 7 as well as a list of costs breakdown. Do you want the costs to be broken down per phase or per profession including consultant fees?

A. Provide both.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 2

DATE: **July 12, 2019**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Offerors**
RE: **Professional Architectural Services for Fire Station #6 RFP-4666-19-DH**

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

1. See attached Geotechnical report for the Fire Station #6 site.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado

Huddleston-Berry
Engineering & Testing, LLC

GEOTECHNICAL AND GEOLOGIC HAZARDS INVESTIGATION
FIRE STATION #6
731 27 ROAD
GRAND JUNCTION, COLORADO
PROJECT#00208-0099

CITY OF GRAND JUNCTION
333 WEST AVENUE, BUILDING C
GRAND JUNCTION, COLORADO 81501

JULY 12, 2019

Huddleston-Berry Engineering and Testing, LLC
2789 Riverside Parkway
Grand Junction, Colorado 81501

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A geologic hazards and geotechnical investigation was conducted for the proposed new Fire Station #6 in Grand Junction, Colorado. The project location is shown on Figure 1 – Site Location Map. The purpose of the investigation was to evaluate the surface and subsurface conditions at the site with respect to geologic hazards, foundation design, pavement design, and earthwork for the proposed construction. This summary has been prepared to include the information required by civil engineers, structural engineers, and contractors involved in the project.

Subsurface Conditions (p. 2)

The subsurface investigation consisted of five borings, drilled on May 30th and June 12th, 2019. The locations of the borings are shown on Figure 2 – Site Plan. The borings generally encountered topsoil, fill, and/or pavement section materials above shale bedrock. Groundwater was not encountered in the subsurface at the time of the investigation. The native shale bedrock is moderately plastic and is anticipated to be slightly to moderately expansive.

Geologic Hazards (p. 3)

No geologic hazards were identified which would preclude development of this property. However, moisture sensitive soils and bedrock were encountered during the subsurface investigation and these will impact site development.

Summary of Foundation Recommendations

Spread Footings, Voided Spread Footings, or Isolated Pads and Grade Beams

- *Structural Fill* – A minimum of 48-inches below foundations. The native bedrock materials are not suitable for reuse as structural fill. Imported structural fill should consist of crusher fines, CDOT Class 6 base course, or other granular material approved by the engineer. (p. 4)
- *Maximum Allowable Bearing Capacity* – 3,000 psf. (p. 5)
- Minimum Dead-Load Pressure – 1,000 psf. (p. 5)

Drilled Piers

- *Minimum Length* – 25 feet. (p. 5)
- *Minimum Embedment* – 15 feet. (p. 5)
- *Allowable Skin Friction* – 1,500 psf for bonded length. (p. 5)
- *Allowable End-Bearing Capacity* – 15,000 psf (p. 5)
- *Minimum Dead-Load* – 5,000 psf (p. 5)

Micro Piles

- *Minimum Length* – 30 feet. (p. 6)
- *Unbonded Length* – 20 feet. (p. 6)
- *Allowable Skin Friction* – 1,500 psf for bonded length. (p. 6)

Other Foundation Criteria

- *Seismic Design* – Site Class C. (p. 6)
- *Lateral Earth Pressure* – 55 pcf active. 75 pcf at-rest. (p. 7)

Summary of Pavement Recommendations (p. 8)

Automobile Parking Areas

ESAL's = 50,000; Structural Number = 2.75

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Concrete Pavement	TOTAL
A	3.0	9.0			12.0
B	4.0	7.0			11.0
C	3.0	6.0	6.0		15.0
Rigid Pavement		6.0		6.0	12.0

Fire Truck Traffic Areas

ESAL's = 350,000; Structural Number = 3.70

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
A	3.0	17.0			20.0
B	4.0	14.0			18.0
C	3.0	6.0	16.0		25.0
Full Depth RP		6.0		8.0	14.0

27 Road Improvements

ESAL's = 875,000, Structural Number = 4.24

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Concrete Pavement	TOTAL
A	4.0	18.0			22.0
B	5.0	15.0			20.0
C	4.0	6.0	17.0		27.0
Rigid Pavement		6.0		8.0	14.0

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FIGURES

Figure 1 – Site Location Map
Figure 2 – Site Plan

APPENDICES

Appendix A – UDSA NRCS Soil Survey Data
Appendix B – Typed Boring Logs
Appendix C – Laboratory Testing Results

1.0 INTRODUCTION

As part of extensive development in Western Colorado, the City of Grand Junction proposes to construct a new fire station. As part of the design development process, Huddleston-Berry Engineering and Testing, LLC (HBET) was retained by the City of Grand Junction to conduct a geologic hazards and geotechnical investigation at the site.

1.1 Scope

As discussed above, a geologic hazards and geotechnical investigation was conducted for Fire Station #6 in Grand Junction, Colorado. The scope of the investigation included the following components:

- Conducting a subsurface investigation to evaluate the subsurface conditions at the site.
- Collecting soil and bedrock samples and conducting laboratory testing to determine the engineering properties of the soils and bedrock at the site.
- Providing recommendations for foundation type and subgrade preparation.
- Providing recommendations for bearing capacity.
- Providing recommendations for lateral earth pressure.
- Providing recommendations for pavements.
- Providing recommendations for drainage, grading, and general earthwork.
- Evaluating potential geologic hazards at the site.

The investigation and report were completed by a Colorado registered professional engineer in accordance with generally accepted geotechnical and geological engineering practices. This report has been prepared for the exclusive use of the City of Grand Junction.

1.2 Site Location and Description

The site is located at 731 27 Road in Grand Junction, Colorado. The project location is shown on Figure 1 – Site Location Map. Fire Station #6 will occupy the southeastern corner of the property.

At the time of the investigation, most of the building site was open. However, a large pile of fill was present in the northeastern portion of the site. The building site generally sloped gently down to the southeast. Vegetation consisted primarily of weeds and grasses. The building site was bordered to the north by undeveloped ground, to the west and south by existing residences, and to the east by 27 Road.

1.3 Proposed Construction

The proposed construction is anticipated to include a new fire station building, concrete aprons, asphalt parking areas, and improvements to 27 Road. The proposed structure will likely be masonry construction.

2.0 GEOLOGIC SETTING

2.1 Soils

Soils data was obtained from the USDA Natural Resource Conservation Service Web Soil Survey. The data indicates that the soils at the site consist of Persayo silty clay loam, 5 to 12 percent slopes and Persayo silty clay loam, 2 to 5 percent slopes. Soil survey data is included in Appendix A.

Structure construction in the site soils is described as being somewhat limited to very limited due to depth to soft bedrock and/or slope. Pavement construction in the native soils is indicated to be very limited due to depth to soft bedrock, low strength, frost action, and/or slope. Excavation in the site soils is described as being very limited due to depth to soft bedrock, dust, slope, and/or unstable excavation walls. The Persayo soils are indicated to have a moderate potential for frost action, high risk of corrosion of uncoated steel, and high risk of corrosion of concrete.

2.2 Geology

According to the *Geologic Map of the Grand Junction Quadrangle, Mesa County, Colorado* (2002), the site is underlain by undivided alluvium and colluvium. The alluvium and colluvium are underlain by Mancos Shale bedrock. The Mancos Shale unit is thick in the Grand Valley and has a low to moderate potential for swelling.

2.3 Groundwater

Groundwater was not encountered in the subsurface at the time of the investigation.

3.0 FIELD INVESTIGATION

3.1 Subsurface Investigation

The subsurface investigation was conducted on May 30th and June 12th, 2019 and consisted of five borings drilled to depths of between approximately 7.6 and 12.8 feet below the existing ground surface. The locations of the borings are shown on Figure 2 – Site Plan. The borings were located in the field relative to existing site features. Typed boring logs are included in Appendix B. Samples of the subsurface soils were collected during Standard Penetration Testing (SPT) and using bulk sampling methods at the locations shown on the logs.

As indicated on the logs, the subsurface conditions at the site were slightly variable. Borings B-1 through B-4, conducted on the building site, encountered 0.5 to 1.0 foot of topsoil or fill materials at the ground surface. Boring B-5, conducted along 27 Road, encountered 5.0-inches of asphalt pavement above granular base course to a depth of 2.0 feet. Below the topsoil, fill, and/or pavement materials, gray, soft to medium hard, highly to moderately weathered shale bedrock extended to the bottoms of all of the borings. As discussed previously, groundwater was not encountered in the subsurface at the time of the investigation.

3.2 Field Reconnaissance

The field reconnaissance included walking the site during the subsurface investigation. As discussed previously, the site was gently sloping. No evidence of recent landslides, debris flows, rockfalls, or other slope instability was observed.

4.0 LABORATORY TESTING

Selected bedrock samples collected from the borings were tested in the Huddleston-Berry Engineering and Testing LLC geotechnical laboratory for Atterberg limits determination. The laboratory testing results are included in Appendix C.

The laboratory testing results indicate that the shale bedrock is moderately plastic. Due to the degree of weathering/fracturing of the material, undisturbed samples of the shale were unable to be collected for swell/consolidation testing. However, based upon the Atterberg limits of the material and upon our experience with the Mancos shale in the Grand Valley, the shale is anticipated to be slightly to moderately expansive.

5.0 GEOLOGIC INTERPRETATION

5.1 Geologic Hazards

The primary geologic hazard identified on the site is the presence of moisture sensitive bedrock.

5.2 Geologic Constraints

In general, the primary geologic constraint to construction at the site is the presence of moisture sensitive bedrock.

5.3 Water Resources

No water supply wells were observed on the property. In addition, groundwater was not encountered to the depth explored. In general, with proper design and construction of stormwater management controls, the proposed construction is not anticipated to adversely impact surface water or groundwater.

5.4 Mineral Resources

Potential mineral resources in the Grand Valley generally include gravel, uranium ore, and commercial rock products such as flagstone. As discussed previously, the site is mapped as being underlain by alluvium and colluvium. However, no gravels were encountered during the subsurface investigation. In general, HBET does not believe that economically recoverable resources exist at this site.

6.0 CONCLUSIONS

Based upon the available data sources, field investigation, and nature of the proposed construction, HBET does not believe that there are any geologic conditions which should preclude subdivision of the site. However, the proposed construction should consider the presence of moisture sensitive bedrock.

7.0 RECOMMENDATIONS

7.1 Foundations

Based upon the subsurface conditions and nature of the proposed construction, both shallow and deep foundations may be considered. Deep foundations will provide the most protection against heave related movements; however, deep foundations can be considerably more expensive.

The recommended shallow foundation alternatives include spread footings, voided spread footings, and isolated pads and grade beams. The recommended deep foundation alternatives include drilled piers and micro piles. The foundation alternatives are discussed below.

Spread Footings, Voided Spread Footings, or Isolated Pads and Grade Beams

As discussed previously, expansive shale bedrock is present in the subsurface. Therefore, to limit the potential for excessive differential movements, it is recommended that shallow foundations be constructed above a minimum of 48-inches of structural fill resting on competent shale bedrock.

The native shale bedrock materials are not suitable for reuse as structural fill. Imported structural fill should consist of a granular, non-expansive, ***non-free draining*** material such as ¼-inch minus crusher fines or CDOT Class 6 base course. However, HBET should be provided the opportunity to evaluate proposed structural fill materials to ensure that they are not free-draining.

Prior to placement of structural fill, it is recommended that the bottoms of the foundation excavations be proofrolled to the Engineer's satisfaction. Soft or weak materials should be replaced with structural fill. Due to the expansion potential of the shale, no moisture should be added to the subgrade.

Structural fill should extend laterally beyond the edges of the foundation a distance equal to the thickness of structural fill. Structural fill should be moisture conditioned, placed in maximum 8-inch loose lifts, and compacted to a minimum of 95% of the standard Proctor maximum dry density for fine grained soils or modified Proctor maximum dry density for coarse grained soils, within ±2% of the optimum moisture content as determined in accordance with ASTM D698 or D1557, respectively.

For foundation building pads prepared as recommended with structural fill consisting of imported granular materials, a maximum allowable bearing capacity of 3,000 psf may be used. However, a minimum dead-load of 1,000 psf is recommended. Where the minimum dead-load is not achievable, such as for interior foundations, the dead-load should be maximized to the extent practical. It is recommended that the bottoms of exterior foundations be at least twenty-four inches below the final grade for frost protection.

Drilled Piers

In general, a minimum total drilled pier length of 25 feet is recommended. In addition, drilled piers should penetrate shale bedrock a minimum of 15 feet.

Skin friction should be ignored along the upper 5 feet of drilled piers embedded in the shale bedrock. An allowable skin friction of 1,500 psf may be used for the portion of the pier in weathered shale bedrock below 5 feet of embedment. In addition, an allowable end-bearing capacity of 15,000 psf may be used for the shale bedrock. However, the piers should be designed for a minimum dead-load pressure of 5,000 psf based upon the pier bottom end area. The skin friction given above can be assumed to act in the direction to resist uplift for the portion of the pier in the bedrock.

Drilled piers should be reinforced their full length using a reinforcement ratio of at least 1.0 percent; however, the piers should be adequately reinforced to resist possible tensile forces due to swelling of the shallow subgrade materials. Concrete used in the piers should be a fluid mix with a minimum slump of 4-inches and a minimum 28-day compressive strength of 3,000 psi.

Swelling soils and bedrock exaggerate group effects on drilled piers. Therefore, the minimum center-to-center spacing of drilled piers should be eight diameters, or twelve feet, whichever is less. Drilled piers grouped less than eight diameters, or twelve feet, center-to-center should be individually evaluated to determine the appropriate reduction in end bearing capacity. A minimum 6-inch void should be provided beneath the grade beams to concentrate pier loadings and prevent expansive materials from exerting uplift forces on the grade beams.

In general, proper construction of drilled piers is critical. Therefore, it is strongly recommended that the piers be installed by a highly experienced contractor. If pier holes are clean and dry, concrete should be placed within 24-hours of drilling. However, if water is present in the pier holes, concrete should be placed the day of drilling. Tremie grouting of piers is recommended. In addition, care should be taken to prevent over-sizing of the tops of the piers. Mushroomed pier heads can reduce the effective dead-load pressure on the piers. Piers should also be within 2% of vertical and constant diameter

Micro Piles

For a micro pile foundation, it is recommended that micro piles have a minimum length of 30 feet. It is However, in order to reduce or eliminate uplift friction in the shallow subsurface, the upper 20 feet of the piles should be sleeved or cased. If subsurface moisture conditions differ than those encountered during the subsurface investigation, the sleeved or cased zone may be need to be increased as directed by the engineer.

Skin friction should be ignored for the sleeved or cased zone. An allowable skin friction value of 1,500 psf may be used for the bedrock below this zone. To ensure friction capacity, pile load testing is strongly recommended. Grout used in the bond zone of the micro piles should have a minimum 28 day compressive strength of 3,000 psi.

In general, micro piles should be installed with a center-to-center spacing of greater than 3 feet. However, to the extent practical, smaller numbers of longer micro piles should be used in lieu of larger numbers of shorter piles. The longer the piles and larger the loads on the piles, the lower the risk of movement. A minimum 6-inch void should be provided below the grade beams to concentrate loadings on the piles. The void forms should also extend above the micro piles such that only the reinforcement bar contacts the grade beam.

7.2 Seismic Design Criteria

In general, based upon the results of the subsurface investigation, the site generally classifies as Site Class C for soft rock.

7.3 Lateral Resistance for Seismic and Wind Loads

Based upon the results of the subsurface investigation, the following parameters are recommended for use in lateral pile capacity analyses:

Soil Type	Stiff Clay
Density (pci)	0.0667
Cohesion (psi)	8
Friction Angle (ϕ)	0
ε_{50} (in/in)	0.007
K (pci)	500

In addition to lateral resistance of the piles, lateral resistance can be developed from sliding friction between the floor slab and the ground. In general, for the native shale bedrock, a sliding friction angle of 18° is recommended. This corresponds to a friction factor of 0.32.

7.4 Corrosion of Concrete and Steel

As indicated previously, the USDA Soil Survey Data indicates that the site soils are highly corrosive to concrete. Therefore, at a minimum, Type I-II sulfate resistant cement is recommended for construction at this site.

The USDA Soil Survey Data also indicates that the site soils have a high potential for corrosion of uncoated steel. Therefore, buried steel utilities or other buried steel structures should consider corrosion in their design.

7.5 Non-Structural Floor Slabs and Exterior Flatwork

As discussed previously, expansive bedrock are present in the subsurface at the site. ***Due to the fact that slabs-on-grade do not generate sufficient loads to resist movement, differential movement of slabs-on-grade is likely***.

In general, the only way to eliminate, or nearly so, the risk of movement of floor slabs would be to support them on the foundations. However, if the City of Grand Junction is willing to accept the risk of using slab-on-grade floor systems, the risk of movement can be reduced by constructing floor slabs above a minimum of 48-inches of structural fill. Subgrade preparation, structural fill materials, and structural fill placement should be in accordance with the *Shallow Foundations* section of this report. It is recommended that exterior flatwork be constructed above a minimum of 18-inches of structural fill.

Slabs-on-grade should not be tied into or otherwise connected to the foundations in any manner. In addition, where a garage floor slab is used, interior, non-bearing partition walls should include a framing void or slip joint which permits a minimum of 2-inches of vertical movement. Also, framing, drywall, trim, brick facing, etc. should not rest on slabs-on-grade.

7.6 Lateral Earth Pressures

Stemwalls or retaining walls should be designed to resist lateral earth pressures. For backfill consisting of imported granular, non-free draining, non-expansive material, we recommend that the walls be designed for an active equivalent fluid unit weight of 55 pcf in areas where no surcharge loads are present. An at-rest equivalent fluid unit weight of 75 pcf is recommended for braced walls. Lateral earth pressures should be increased as necessary to reflect any surcharge loading behind the walls. Native shale materials should not be used as backfill.

7.7 Drainage

Drainage and grading are critical to the performance of the foundations and any slabs-on-grade. In order to improve the long-term performance of the foundations and slabs-on-grade, grading around the structure should be designed to carry precipitation and runoff away from the structure. It is recommended that the finished ground surface drop at least twelve inches within the first ten feet away from the structure. However, where sidewalks, pavements, etc. are adjacent to the structure, the grade can be reduced to ADA compliant grade (~2.5-inches in ten feet).

It is also recommended that landscaping within ten feet of the structure include primarily desert plants with low water requirements. In addition, it is recommended that automatic irrigation, including drip lines, within ten feet of foundations be minimized.

It is recommended that conventional downspouts be utilized with extensions that terminate a minimum of 10 feet from the structure or beyond the backfill zone, whichever is greater. However, if subsurface downspout drains are utilized, they should be carefully constructed of solid wall PVC pipe and daylight at least 15 feet from the structure. An impermeable membrane is recommended below subsurface downspout drains to reduce the potential for leaks in the drains to impact the structure. Dry wells should not be used.

In order to reduce the potential for surface moisture to impact the structure, a perimeter foundation drain is also recommended. In general, the perimeter foundation drain should consist of prefabricated drain materials or a perforated pipe and gravel system with the flowline of the drain at the bottom of the foundation (at the highest point). The perimeter drain should slope at a minimum of 1.0% to daylight or to a sump with pump. The drain should also include an impermeable membrane at the base to limit the potential for moisture to infiltrate vertically down below the foundations.

7.8 Excavations

Excavations in the soils and bedrock at the site may stand for short periods of time but should not be considered to be stable. Therefore, trenching and excavations should be sloped back, shored, or shielded for worker protection in accordance with applicable OSHA standards. The native soils and bedrock at the site generally classify as Type C soil with regard to OSHA's *Construction Standards for Excavations*. For Type C soils, the maximum allowable slope in temporary cuts is 1.5H:1V. However, the soil classification is based solely on the boring data and a Type B or Type A rating may be possible. HBET should be contacted to further evaluate the soils and bedrock during construction.

7.9 Pavements

The proposed construction is anticipated to include paved aprons, paved parking areas, and improvements to 27 Road. From the subsurface investigation, the pavement subgrade materials at the site consist primarily of shale bedrock. As discussed previously, the shale is expansive. Therefore, the minimum recommended Resilient Modulus of 3,000 psi was utilized for the pavement design.

Based upon the subgrade conditions and anticipated traffic loading, asphalt and concrete pavement section alternatives were developed in accordance with AASHTO design methodologies. The following minimum pavement section alternatives are recommended:

Automobile Parking Areas
ESAL's = 50,000; Structural Number = 2.75

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Concrete Pavement	TOTAL
A	3.0	9.0			12.0
B	4.0	7.0			11.0
C	3.0	6.0	6.0		15.0
Rigid Pavement		6.0		6.0	12.0

Fire Truck Traffic Areas
ESAL's = 350,000; Structural Number = 3.70

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Rigid Pavement	TOTAL
A	3.0	17.0			20.0
B	4.0	14.0			18.0
C	3.0	6.0	16.0		25.0
Full Depth RP		6.0		8.0	14.0

27 Road Improvements
ESAL's = 875,000, Structural Number = 4.24

ALTERNATIVE	PAVEMENT SECTION (Inches)				
	Hot-Mix Asphalt Pavement	CDOT Class 6 Base Course	CDOT Class 3 Subbase Course	Concrete Pavement	TOTAL
A	4.0	18.0			22.0
B	5.0	15.0			20.0
C	4.0	6.0	17.0		27.0
Rigid Pavement		6.0		8.0	14.0

Prior to pavement placement, the roadway prism should be stripped of all topsoil, fill, or other unsuitable materials. It is recommended that the subgrade be proofrolled to the Engineer's satisfaction. Due to the expansion potential of the shale, minimal moisture should be added to the subgrade.

Aggregate base course and subbase course should be placed in maximum 9-inch loose lifts, moisture conditioned, and compacted to a minimum of 95% and 93% of the maximum dry density, respectively, at -2% to +3% of optimum moisture content as determined by AASHTO T-180. In addition to density testing, base course should be proofrolled to verify subgrade stability.

It is recommended that Hot-Mix Asphaltic (HMA) pavement conform to CDOT grading SX or S specifications and consist of an approved 75 gyration Superpave method mix design. HMA pavement should be compacted to between 92% and 96% of the maximum theoretical density. An end point stress of 50 psi should be used. It is recommended that rigid pavements consist of CDOT Class P concrete or alternative approved by the Engineer. In addition, pavements should conform to local specifications.

The long-term performance of the pavements is dependent on positive drainage away from the pavements. Ditches, culverts, and inlet structures in the vicinity of paved areas must be maintained to prevent ponding of water on the pavement.

8.0 GENERAL

The recommendations included above are based upon the results of the subsurface investigation and on our local experience. These conclusions and recommendations are valid only for the proposed construction.

As discussed previously, the subsurface conditions encountered in the borings were slightly variable. However, the precise nature and extent of subsurface variability may not become evident until construction. The recommendations contained herein are designed to reduce the risk and magnitude of movements and it is extremely critical that ***ALL*** of the recommendations herein be applied to the design and construction. However, HBET cannot predict long-term changes in subsurface moisture conditions and/or the precise magnitude or extent of any volume change in the native soils and/or bedrock. ***Where significant increases in subsurface moisture occur due to poor grading, improper stormwater management, utility line failure, excess irrigation, or other cause, during or after construction, significant movements are possible***.

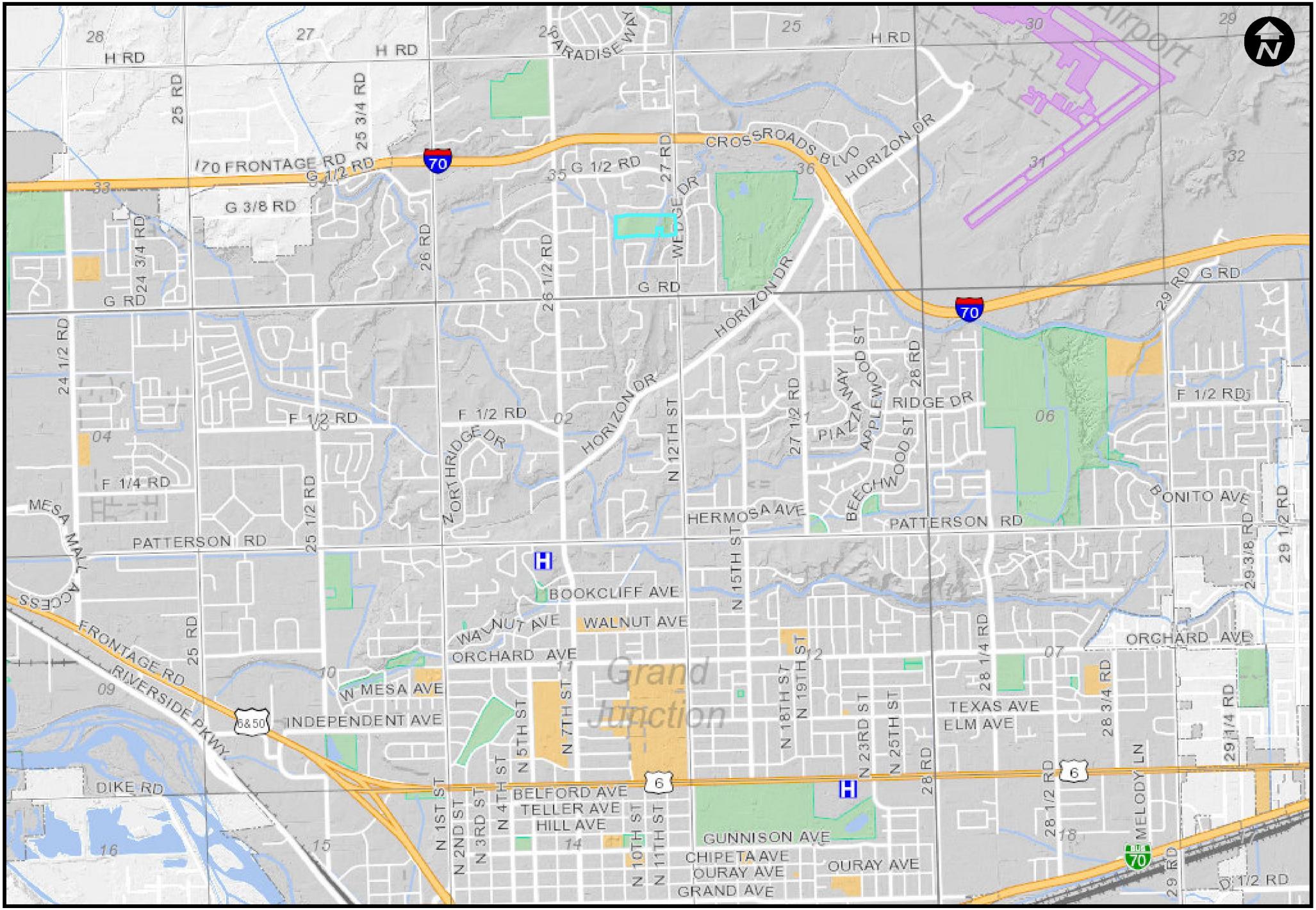
In addition, the success of the structure foundations, slabs, etc. is critically dependent upon proper construction. Therefore, HBET should be retained to provide materials testing, special inspections, and engineering oversight during ***ALL*** phases of the construction to ensure conformance with the recommendations herein.

Huddleston-Berry Engineering and Testing, LLC is pleased to be of service to your project. Please contact us if you have any questions or comments regarding the contents of this report.

Respectfully Submitted:
Huddleston-Berry Engineering and Testing, LLC

Michael A. Berry, P.E.
Vice President of Engineering

FIGURES



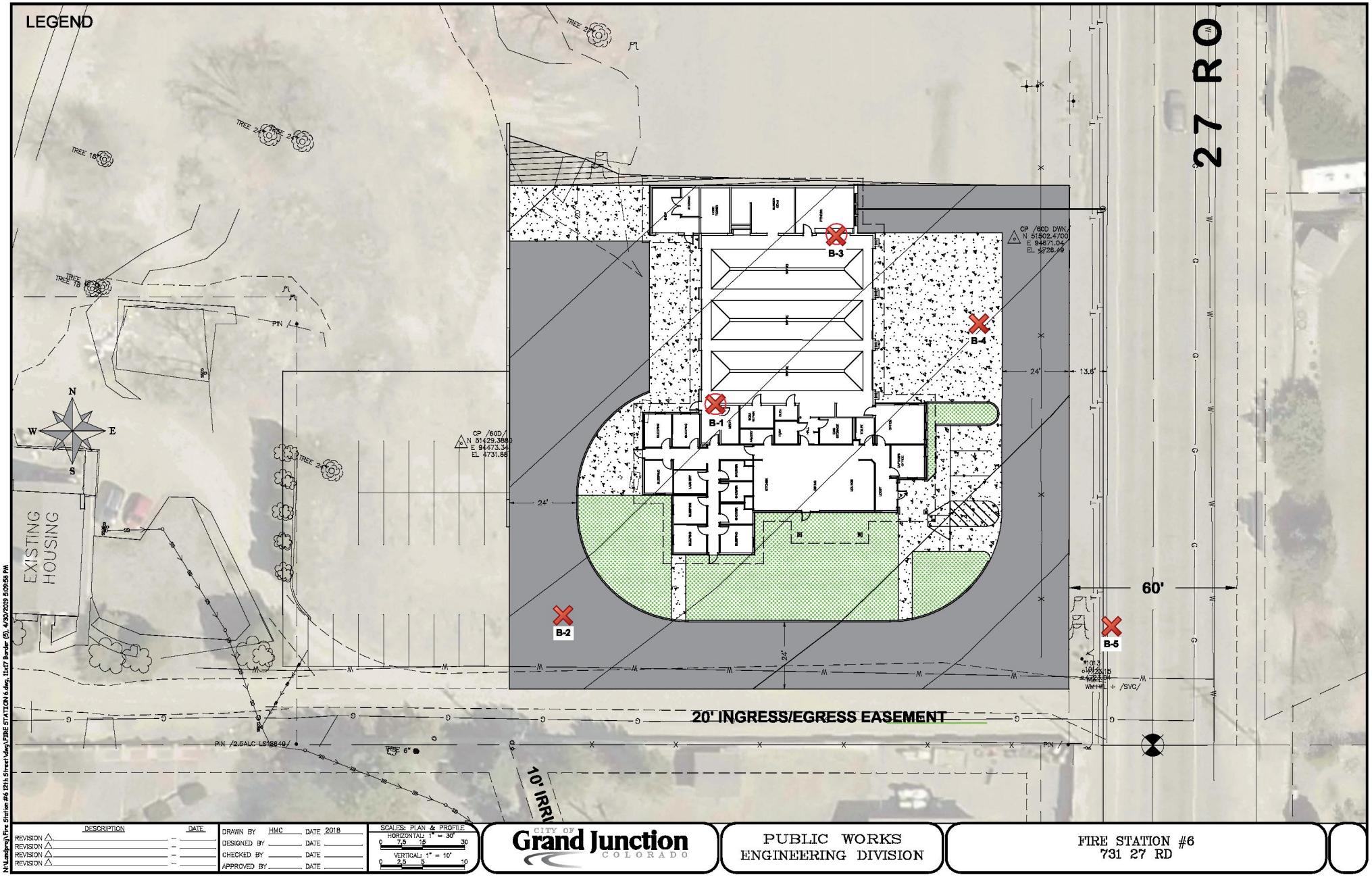
Mesa County Map

The Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. GIS is not intended or does not replace legal description information in the chain of title and other information contained in official government records such as the County Clerk and Recorders office or the courts. In addition, the representations of location in this GIS cannot be substitute for actual legal surveys.
The information contained herein is believed accurate and suitable for the limited uses, and subject to the limitations, set forth above. Mesa County makes no warranty as to the accuracy or suitability of any information contained herein. Users assume all risk and responsibility for any and all damages, including consequential damages, which may flow from the user's use of this information.

0 0.25 0.5 1 mi
0 0.3 0.6 1.2 km

Print Date: June 20, 2019

Mesa County, Colorado
GIS/IT Department
gis.mesacounty.us



DESCRIPTION	DATE
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	

DRAWN BY HMC DATE 2018
DESIGNED BY DATE
CHECKED BY DATE
APPROVED BY DATE

SCALES: PLAN & PROFILE
HORIZONTAL: 1" = 30'
0 7.5 15 30
VERTICAL: 1" = 10'
0 2.5 5 10

CITY OF Grand Junction COLORADO

PUBLIC WORKS
ENGINEERING DIVISION

FIRE STATION #6
731 27 RD

N:\Landproj\Fire Station #6 12th Street Way\FIRE STATION 6.dwg, 11x17 Border (2), 4/30/2019 5:09:58 PM

APPENDIX A
Soil Survey Data

Soil Map—Mesa County Area, Colorado

Map Scale: 1:446 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 5 10 20 30

Feet
0 20 40 80 120

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mesa County Area, Colorado
Survey Area Data: Version 9, Sep 10, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 13, 2010—Aug 8, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cc	Persayo silty clay loam, 5 to 12 percent slopes	0.0	2.2%
Ce	Persayo silty clay loam, 2 to 5 percent slopes	1.0	97.8%
Totals for Area of Interest		**1.0**	**100.0%**

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description

Mesa County Area, Colorado

Cc—Persayo silty clay loam, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: k0c0
Elevation: 4,490 to 5,220 feet

Mean annual precipitation: 6 to 9 inches
Mean annual air temperature: 50 to 55 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Persayo and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Persayo

Setting

Landform: Pediments
Landform position (two-dimensional): Backslope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Cretaceous source residuum weathered from calcareous shale

Typical profile

Ap - 0 to 4 inches: silty clay loam
C - 4 to 15 inches: silty clay loam
Cr - 15 to 60 inches: bedrock

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Gypsum, maximum in profile: 10 percent
Salinity, maximum in profile: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 5.0
Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: Desert Loamy Clay (Shadscale) (R034BY109UT)
Hydric soil rating: No

Ce—Persayo silty clay loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: k0c2
Elevation: 4,490 to 5,220 feet

Mean annual precipitation: 6 to 9 inches
Mean annual air temperature: 50 to 55 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Persayo and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Persayo

Setting

Landform: Pediments
Landform position (two-dimensional): Backslope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Cretaceous source residuum weathered from calcareous shale

Typical profile

Ap - 0 to 4 inches: silty clay loam
C - 4 to 15 inches: silty clay loam
Cr - 15 to 60 inches: bedrock

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.00 to 0.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Gypsum, maximum in profile: 10 percent
Salinity, maximum in profile: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 5.0
Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: Desert Loamy Clay (Shadscale) (R034BY109UT)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Mesa County Area, Colorado
Survey Area Data: Version 9, Sep 10, 2018

Dwellings and Small Commercial Buildings

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. This table shows the degree and kind of soil limitations that affect dwellings and small commercial buildings.

The ratings in the table are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Report—Dwellings and Small Commercial Buildings

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Dwellings and Small Commercial Buildings–Mesa County Area, Colorado							
Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Cc—Persayo silty clay loam, 5 to 12 percent slopes							
Persayo	90	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.04	Slope	0.04	Slope	1.00

Dwellings and Small Commercial Buildings–Mesa County Area, Colorado							
Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ce—Persayo silty clay loam, 2 to 5 percent slopes							
Persayo	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
						Slope	0.01

Data Source Information

Soil Survey Area: Mesa County Area, Colorado
Survey Area Data: Version 9, Sep 10, 2018

Roads and Streets, Shallow Excavations, and Lawns and Landscaping

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. This table shows the degree and kind of soil limitations that affect local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the table are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Report—Roads and Streets, Shallow Excavations, and Lawns and Landscaping

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Roads and Streets, Shallow Excavations, and Lawns and Landscaping–Mesa County Area, Colorado							
Map symbol and soil name	Pct. of map unit	Lawns and landscaping		Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Cc—Persayo silty clay loam, 5 to 12 percent slopes							
Persayo	90	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Droughty	0.87	Low strength	1.00	Dusty	0.50
		Dusty	0.50	Frost action	0.50	Slope	0.04
		Low exchange capacity	0.50	Slope	0.04	Unstable excavation walls	0.01
		Slope	0.04				

Roads and Streets, Shallow Excavations, and Lawns and Landscaping–Mesa County Area, Colorado							
Map symbol and soil name	Pct. of map unit	Lawns and landscaping		Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ce—Persayo silty clay loam, 2 to 5 percent slopes							
Persayo	90	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Droughty	0.87	Low strength	1.00	Dusty	0.50
		Dusty	0.50	Frost action	0.50	Unstable excavation walls	0.01
		Low exchange capacity	0.50				

Data Source Information

Soil Survey Area: Mesa County Area, Colorado
Survey Area Data: Version 9, Sep 10, 2018

Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high.* It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Report—Soil Features

Soil Features–Mesa County Area, Colorado									
Map symbol and soil name	**Restrictive Layer**				**Subsidence**		**Potential for frost action**	**Risk of corrosion**	
	Kind	**Depth to top**	**Thickness**	**Hardness**	**Initial**	**Total**		**Uncoated steel**	**Concrete**
		Low-RV-High	*Range*		*Low-High*	*Low-High*			
		In	*In*		*In*	*In*			
Cc—Persayo silty clay loam, 5 to 12 percent slopes									
Persayo	Paralithic bedrock	10-15-20	—	Weakly cemented	0	0	Moderate	High	High
Ce—Persayo silty clay loam, 2 to 5 percent slopes									
Persayo	Paralithic bedrock	10-15-20	—	Weakly cemented	0	0	Moderate	High	High

Data Source Information

Soil Survey Area: Mesa County Area, Colorado
Survey Area Data: Version 9, Sep 10, 2018

APPENDIX B
Typed Boring Logs

Huddleston-Berry Engineering & Testing, LLC
640 White Avenue, Unit B
Grand Junction, CO 81501
970-255-8005
970-255-6818

BORING NUMBER B-1

CLIENT City of Grand Junction
PROJECT NAME Fire Station #6
PROJECT NUMBER 00208-0099
PROJECT LOCATION Grand Junction, CO
DATE STARTED 5/30/19 **COMPLETED** 5/30/19
GROUND ELEVATION ___ **HOLE SIZE** 4-inches
DRILLING CONTRACTOR S. McKracken
GROUND WATER LEVELS:
DRILLING METHOD Simco 2000 Track Rig
AT TIME OF DRILLING dry
LOGGED BY SD **CHECKED BY** MAB
AT END OF DRILLING dry
NOTES ___
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Sandy GRAVEL (FILL)										
		SHALE, grey, soft to medium hard, highly weathered to moderately weathered										
2.5			SS 1	72	11-16-19 (35)							
5.0												
7.5			SS 2	92	22-28				35	23	12	
10.0												
12.5			SS 3	100	25-25/4"							
		Bottom of hole at 12.8 feet.										

GEOTECH BH COLUMNS 00208-0099 FIRE STATION 6.GPJ GINT US LAB.GDT 7/11/19

Huddleston-Berry Engineering & Testing, LLC
640 White Avenue, Unit B
Grand Junction, CO 81501
970-255-8005
970-255-6818

BORING NUMBER B-2

CLIENT City of Grand Junction
PROJECT NAME Fire Station #6
PROJECT NUMBER 00208-0099
PROJECT LOCATION Grand Junction, CO
DATE STARTED 5/30/19 **COMPLETED** 5/30/19
GROUND ELEVATION _____ **HOLE SIZE** 4-inches
DRILLING CONTRACTOR S. McKracken
GROUND WATER LEVELS:
DRILLING METHOD Simco 2000 Track Rig
AT TIME OF DRILLING dry
LOGGED BY SD **CHECKED BY** MAB
AT END OF DRILLING dry
NOTES _____
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Lean CLAY with Organics (TOPSOIL)										
		SHALE, grey, soft to medium hard, highly weathered										
2.5			SS 1	56	4-8-13 (21)							
5.0												
7.5												
10.0			SS 2	100	38-12/2"							
		Bottom of hole at 10.6 feet.										

GEOTECH BH COLUMNS 00208-0099 FIRE STATION 6.GPJ GINT US LAB.GDT 7/11/19

Huddleston-Berry Engineering & Testing, LLC
640 White Avenue, Unit B
Grand Junction, CO 81501
970-255-8005
970-255-6818

BORING NUMBER B-3

CLIENT City of Grand Junction
PROJECT NAME Fire Station #6
PROJECT NUMBER 00208-0099
PROJECT LOCATION Grand Junction, CO
DATE STARTED 5/30/19 **COMPLETED** 5/30/19
GROUND ELEVATION ---- **HOLE SIZE** 4-inches
DRILLING CONTRACTOR S. McKracken
GROUND WATER LEVELS:
DRILLING METHOD Simco 2000 Track Rig
AT TIME OF DRILLING dry
LOGGED BY SD **CHECKED BY** MAB
AT END OF DRILLING dry
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Sandy GRAVEL (FILL)										
		SHALE, grey, soft to medium hard, highly weathered										
2.5			SS 1	83	16-21-27 (48)							
5.0												
7.5			SS 2	100	40-10/1"							
		Bottom of hole at 7.6 feet.										

Huddleston-Berry Engineering & Testing, LLC
640 White Avenue, Unit B
Grand Junction, CO 81501
970-255-8005
970-255-6818

BORING NUMBER B-4

CLIENT City of Grand Junction
PROJECT NAME Fire Station #6
PROJECT NUMBER 00208-0099
PROJECT LOCATION Grand Junction, CO
DATE STARTED 5/30/19 **COMPLETED** 5/30/19
GROUND ELEVATION ---- **HOLE SIZE** 4-inches
DRILLING CONTRACTOR S. McKracken
GROUND WATER LEVELS:
DRILLING METHOD Simco 2000 Track Rig
AT TIME OF DRILLING dry
LOGGED BY SD **CHECKED BY** MAB
AT END OF DRILLING dry
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Sandy GRAVEL (FILL)										
		SHALE, grey, soft to medium hard, highly weathered										
2.5			SS 1	89	10-19-19 (38)							
5.0												
7.5												
10.0			SS 2	100	29-21/3"				32	23	9	
		Bottom of hole at 10.8 feet.										

GEOTECH BH COLUMNS 00208-0099 FIRE STATION 6.GPJ GINT US LAB.GDT 7/11/19

Huddleston-Berry Engineering & Testing, LLC
640 White Avenue, Unit B
Grand Junction, CO 81501
970-255-8005
970-255-6818

BORING NUMBER B-5

CLIENT City of Grand Junction
PROJECT NAME Fire Station #6
PROJECT NUMBER 00208-0099
PROJECT LOCATION Grand Junction, CO
DATE STARTED 6/12/19 **COMPLETED** 6/12/19
GROUND ELEVATION _____ **HOLE SIZE** 4-inches
DRILLING CONTRACTOR S. McKracken
GROUND WATER LEVELS:
DRILLING METHOD Simco 2000 Track Rig
AT TIME OF DRILLING dry
LOGGED BY SD **CHECKED BY** MAB
AT END OF DRILLING dry
NOTES _____
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		ASPHALT										
		Granular Base Course										
2.5		SHALE, grey, soft to medium hard, highly weathered	SS 1	33	4-4-4 (8)							
5.0												
7.5			SS 2	100	20-30							
10.0			SS 3	100	24-26							
		Bottom of hole at 11.0 feet.										

GEOTECH BH COLUMNS 00208-0099 FIRE STATION 6.GPJ GINT US LAB.GDT 7/11/19

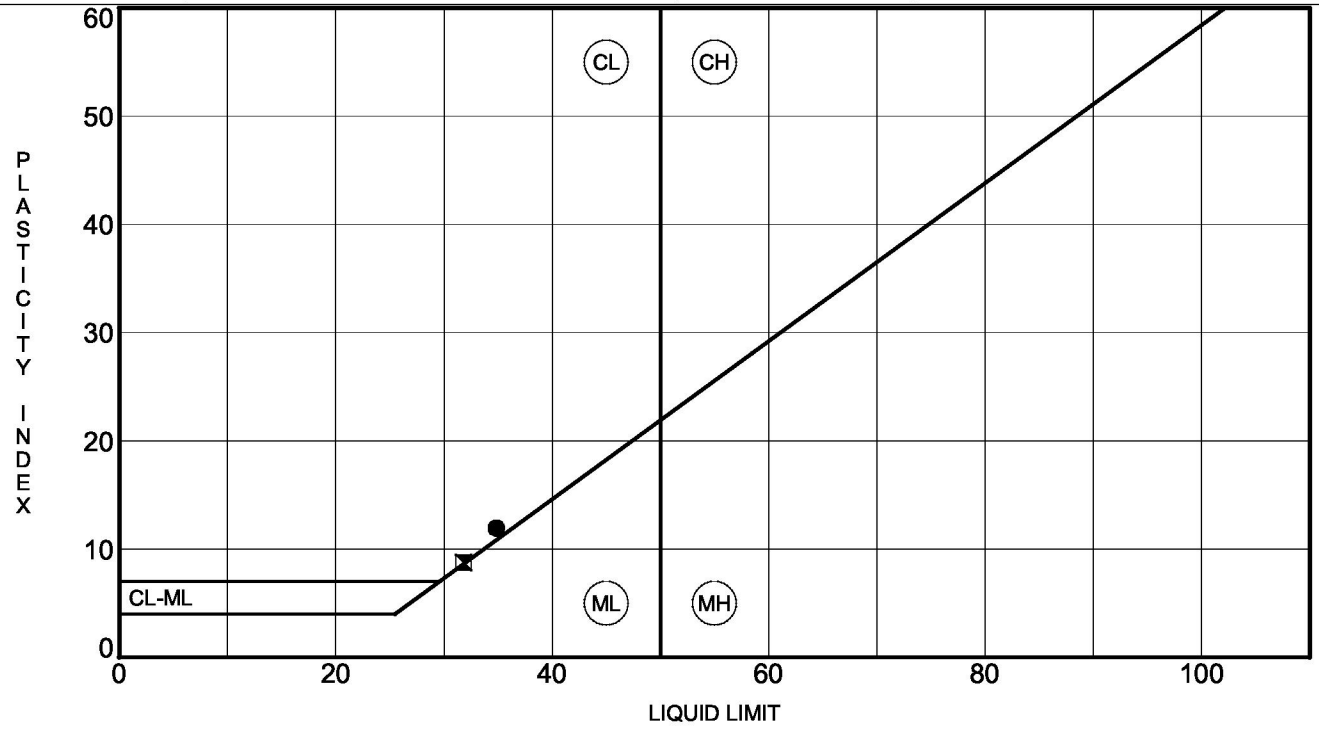
APPENDIX C
Laboratory Testing Results

Huddleston-Berry Engineering & Testing, LLC
640 White Avenue, Unit B
Grand Junction, CO 81501
970-255-8005
970-255-6818

ATTERBERG LIMITS' RESULTS

CLIENT City of Grand Junction **PROJECT NAME** Fire Station #6

PROJECT NUMBER 00208-0099 **PROJECT LOCATION** Grand Junction, CO



	Specimen Identification		LL	PL	PI	#200	Classification
●	B-1, SS2	5/2019	35	23	12		
⧓	B-4, SS2	5/2019	32	23	9		

CITY OF Grand Junction COLORADO

Purchasing Division

ADDENDUM NO. 2

DATE: **September 27, 2019**
FROM: **City of Grand Junction Purchasing Division**
TO: **All Offerors**
RE: **City of Grand Junction Fire Station #6 CM/GC RFP-4703-19-DH**

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

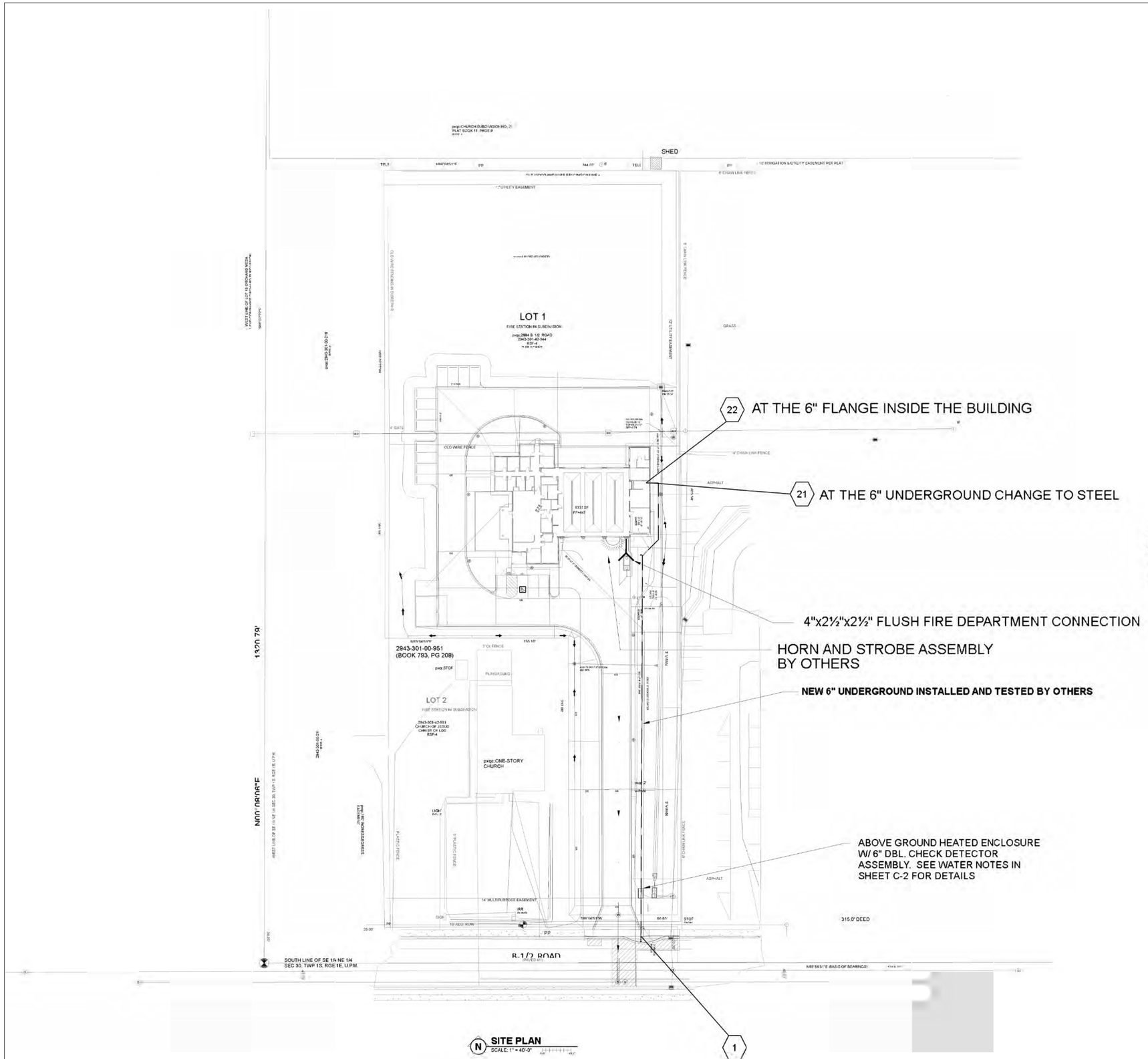
1. For Contractor's review, please see the attached MEP "as-built" drawings for Fire Station #4, which Fire Station #6 shall be based on.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Duane Hoff Jr., Senior Buyer
City of Grand Junction, Colorado



N **SITE PLAN**
SCALE: 1" = 40'-0"

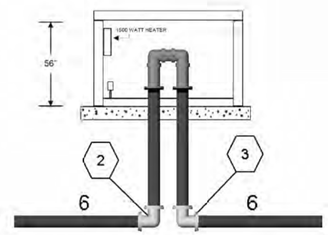
C-2 NOTES

WATER LINE CONSTRUCTION:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL BACKFLOW PREVENTION EQUIPMENT AND ABOVE GROUND ENCLOSURES. Double Check Detector Assembly devise shall be "Watts" Series L709DCDA assemblies or FEBCO Masterseries 876VST (N-Pattern), or Ute Water Approved equal.

2. Above Ground Enclosures shall be as manufactured by Aqua Shield or WATTS or approved equal and be aluminum, insulated with freeze protection, heated, with service access and mounted on a 4" minimum thick concrete slab. Aqua Shield #NBFP8 or Watts Model # WB-N6 or Ute Water approved Equal.

3. All water line and water service construction shall be constructed in accordance with the Ute Water District Standards and Specifications.



N **BACKFLOW DETAIL**
SCALE: NO SCALE
INSTALLED AND TESTED BY OTHERS

GENERAL NOTES

1. ALL PIPE AND HANGER INSTALLATION SHALL CONFORM TO THE MINIMUM STANDARDS OF N.F.P.A. 13 AND THE GRAND JUNCTION FIRE DEPARTMENT.
2. ALL UNDERGROUND PIPING IS INSTALLED AND TESTED BY OTHERS. DYNAMIC FIRE PROTECTION SYSTEMS TO BEGIN WORK AT THE NEW 6" FLANGE INSIDE THE BUILDING.
3. SCOPE OF WORK IS INSTALLING SPRINKLER SYSTEM THROUGHOUT THE ENTIRE BUILDING.
4. ALL THREADED PIPING 1½" AND SMALLER TO BE THREADABLE THINWALL BLACK STEEL. ALL GROOVED PIPING WITH WELDED OUTLETS 2" AND LARGER TO BE ASTM 795 THINWALL PIPE.
5. (0) INDICATES HYDRAULIC REFERENCE POINT.
6. 0.0 FF INDICATES CENTERLINE ABOVE FINISHED FLOOR.
7. -2.22 TS INDICATES CENTERLINE BELOW TOP OF STEEL.
8. INDICATES HANGER LOCATION.
9. INDICATES EXISTING PIPING TO REMAIN.
10. ALL PIPE AND HANGER DIMENSIONING IS CENTER TO CENTER EXCEPT FOR THREADED PIPE WHICH IS A CUT DIMENSION.
11. ALL NEW AND EXISTING PIPING TO BE HYDROSTATICALLY TESTED PER N.F.P.A 13.
12. UNDERGROUND SUPPLY PIPING TO FLUSHED PER N.F.P.A. 13 10.10. BY INSTALLING CONTRACTOR PRIOR TO INSTALLATION OF BACKFLOW PREVENTER.
13. OWNER IS RESPONSIBLE FOR MAINTAINING A MINIMUM OF 40° F TO PREVENT FREEZING. IN THE AREAS SERVED BY THE WET SPRINKLER SYSTEM.

NICET LEVEL IV DESIGNER
ERIC L. SLATER
#90020

REVISIONS

NO.	DATE	BY	REVISION DESCRIPTION

SYMBOLS

Symbol	Manufacturer	SIN/Model	Quantity	K-Factor	Type	Response	Orifice	Finish	Temperature

HYDRAULIC DESIGN DATA

REM. AREA #	HAZARD CLASSIFICATION	DENSITY GPM/SQ. FT.	AREA OF APPLIC.	LENGTH FACTOR	INSIDE ALLOW	OUTSIDE ALLOW	# HEADS FLOWING	TOTAL SYSTEM REQUIREMENTS GPM	PSI	AT NODE

WATER SUPPLY INFORMATION: STATIC PRESSURE 84 PSI; RESIDUAL PRESSURE 60PSI, WITH 950 G.P.M. FLOWING
TEST LOCATION: 2913 Road BY: Ute Water Conservancy District TEST DATE: 8.24.15

DYNAMIC FIRE PROTECTION SYSTEMS INC.
RCC21002
427 Meadow Cr. Ridgway, CO 81432

SCALE: AS NOTED
DRAWN BY: ELS
CHECKED BY: GM
THESE PLANS PREPARED AT:
CONTRACT WITH: FCI Constructors
DATE: 09/27/15

CONTRACT:
Orchard Mesa Fire Station
2884 B½ Road
Grand Junction, CO 81503

SHEET DESCRIPTION: 215179
DRAWING NO. **FP-SITE**

Sprinkler Legend

Hydraulic Information	
Remote Area Remote Area 3	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY	0.1Ggpm/ft² for 900.00ft² (Actual 995.25ft²)
TOTAL HOSE STREAMS	100.00
DRY CAPACITY	97.34gal
TOTAL HEADS FLOWING	11
K-FACTOR	5.6
TOTAL WATER REQUIRED	340.47
TOTAL PRESSURE REQUIRED	49.415
BASE of RISER (gpm)	340.47
BASE of RISER (psi)	49.415
SAFETY MARGIN (psi)	+14 312 (22.5%)

QUICK RESPONSE AREA REDUCTION PER N.F.P.A. 13 11.2.3.2.3.1 2013

Hydraulic Information	
Remote Area Remote Area 1	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY	0.1Ggpm/ft² for 2535.00ft² (Actual 2013.34ft²)
TOTAL HOSE STREAMS	100.00
DRY CAPACITY	97.34gal
TOTAL HEADS FLOWING	17
K-FACTOR	4.2
TOTAL WATER REQUIRED	338.86
TOTAL PRESSURE REQUIRED	54.551
BASE of RISER (gpm)	338.86
BASE of RISER (psi)	54.551
SAFETY MARGIN (psi)	+8.559 (14.0%)

Hydraulic Information	
Remote Area Remote Area 2	
OCCUPANCY CLASSIFICATION	Ordinary Group I
DENSITY	0.15gpm/ft² for 1950.00ft² (Actual 1947.72ft²)
TOTAL HOSE STREAMS	250.00
DRY CAPACITY	97.34gal
TOTAL HEADS FLOWING	18
K-FACTOR	4.2
TOTAL WATER REQUIRED	574.44
TOTAL PRESSURE REQUIRED	48.585
BASE of RISER (gpm)	574.44
BASE of RISER (psi)	48.585
SAFETY MARGIN (psi)	+14.242 (22.7%)

NOTE: ALL BRANCHLINES SHALL BE PITCHED AT LEAST ¼" PER 10 FT, AND MAINS SHALL BE PITCHED AT LEAST ¼" PER 10 FT.

MAIN BUILDING RISER

6" UNDERGROUND INSTALLED BY OTHERS SEE SITE PLAN FOR DETAILS

4" GROOVED CHECK VALVE

HORN AND STROBE ASSEMBLY BY OTHERS

4"x2½"x2½" FLUSH FIRE DEPARTMENT CONNECTION

3 DISCHARGE SIDE OF BACKFLOW PREVENTER

2 SUPPLY SIDE OF BACKFLOW PREVENTER

1 AT THE UNDERGROUND CONNECTION

DRY SYSTEM RISER

6.11 ft

WET SYSTEM FIRE PROTECTION PLAN

N SCALE: 1/8" = 1'-0"

DRY SYSTEM FIRE PROTECTION PLAN

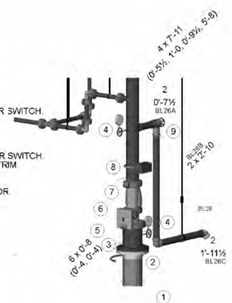
N SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. 6" UNDERGROUND INSTALLED MY OTHERS.
2. 6" FLANGE GROOVE ADAPTER.
3. 6" GALVANIZED SPOOL PIECE GXG.
4. 300# GAUGE ASSEMBLY.
5. 6"x4" GROOVE REDUCING COUPLING.
6. 4" GROOVED BUTTERFLY VALVE WITH TAMPER SWITCH.
7. 4" GROOVED CHECK VALVE.
8. 4" FLOW SWITCH.
9. 2" AGF TEST AND DRAIN ASSEMBLY.
10. 2½" SUPPLY FROM THE WET SYSTEM.
11. 2½" GROOVE BUTTERFLY VALVE WITH TAMPER SWITCH.
12. 2½" TYCO DRY PIPE VALVE WITH STANDARD TRIM.
13. POTTER PS-10-2A PRESSURE SWITCH.
14. POTTER PS-40 PRESSURE SWITCH.
15. GENERAL AIR RISER MOUNT AIR COMPRESSOR.
16. 1¼" MAIN DRAIN VALVE.

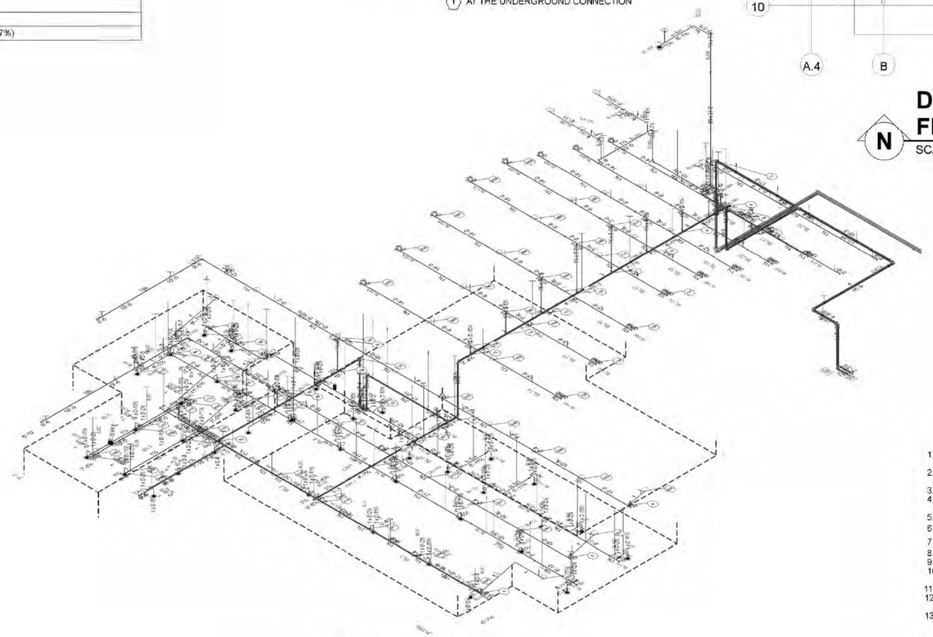
DRY SYSTEM RISER DETAIL

SCALE: NO SCALE



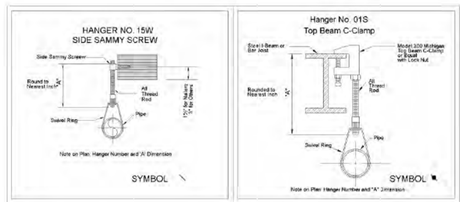
MAIN BUILDING RISER DETAIL

SCALE: NO SCALE



ISOMETRIC PLAN

SCALE: 1/8" = 1'-0"



GENERAL NOTES

1. ALL PIPE AND HANGER INSTALLATION SHALL CONFORM TO THE MINIMUM STANDARDS OF N.F.P.A. 13 AND THE GRAND JUNCTION FIRE DEPARTMENT.
2. ALL UNDERGROUND PIPING IS INSTALLED AND TESTED BY OTHERS. DYNAMIC FIRE PROTECTION SYSTEMS TO BEGIN WORK AT THE NEW 6" FLANGE INSIDE THE BUILDING.
3. SCOPE OF WORK IS INSTALLING SPRINKLER SYSTEM THROUGHOUT THE ENTIRE BUILDING.
4. ALL THREADED PIPING 1¼" AND SMALLER TO BE THREADABLE THINWALL BLACK STEEL. ALL GROOVED PIPING WITH WELDED OUTLETS 2" AND LARGER TO BE ASTM 795 THINWALL PIPE.
5. ⓪ 0'-0 FF INDICATES HYDRAULIC REFERENCE POINT.
6. 10'-0 FF INDICATES CENTERLINE ABOVE FINISHED FLOOR.
7. 222 TS INDICATES CENTERLINE BELOW TOP OF STEEL.
8. INDICATES HANGER LOCATION.
9. INDICATES EXISTING PIPING TO REMAIN.
10. ALL PIPE AND HANGER DIMENSIONING IS CENTER TO CENTER EXCEPT FOR THREADED PIPE WHICH IS A CUT DIMENSION.
11. ALL NEW AND EXISTING PIPING TO BE HYDROSTATICALLY TESTED PER N.F.P.A. 13.
12. UNDERGROUND SUPPLY PIPING TO FLUSHED PER N.F.P.A. 13 10.10. BY INSTALLING CONTRACTOR PRIOR TO INSTALLATION OF BACKFLOW PREVENTER.
13. OWNER IS RESPONSIBLE FOR MAINTAINING A MINIMUM OF 40° F TO PREVENT FREEZING IN THE AREAS SERVED BY THE WET SPRINKLER SYSTEM.

NICET LEVEL IV DESIGNER
ERIC L. SLATER
#90020

REVISIONS			
NO.	DATE	BY	REVISION DESCRIPTION

SYMBOLS

HYDRAULIC DESIGN DATA

REM. AREA #	HAZARD CLASSIFICATION	DENSITY GPM/SQ. FT.	AREA OF APPLIC.	LENGTH INSIDE OUTSIDE	#HEADS FLOWING	TOTAL SYSTEM REQUIREMENTS GPM	PSI	AT NODE

WATER SUPPLY INFORMATION: STATIC PRESSURE 64 PSI RESIDUAL PRESSURE 60PSI WITH 1500 GPM FLOWING
TEST LOCATION: 2913 Road BY: Mo Water Conservancy District TEST DATE: 8-24-15

Sprinkler Legend

Symbol	Manufacturer	SIN/Model	Quantity	K-Factor	Type	Response	Orifice	Finish	Temperature
●	Tyco	TY3231	39	5.6	Pendent	½	Quick	½"	Chrome
○	Tyco	TY3131	87	4.2	Upright	½	Quick	½"	Brass
⊙	Tyco	TY3156	1	5.6	Upright	1	Quick	½"	Chrome
			Total = 127						

DYNAMIC FIRE PROTECTION SYSTEMS INC.
RC2210002
427 Meadow Cr, Ridgeway, CO 81432

SCALE: AS NOTED
DRAWN BY: ELS
CHECKED BY: GM
THESE PLANS PREPARED AT:
CONTRACT WITH: FCI Constructors
DATE: 09/27/15

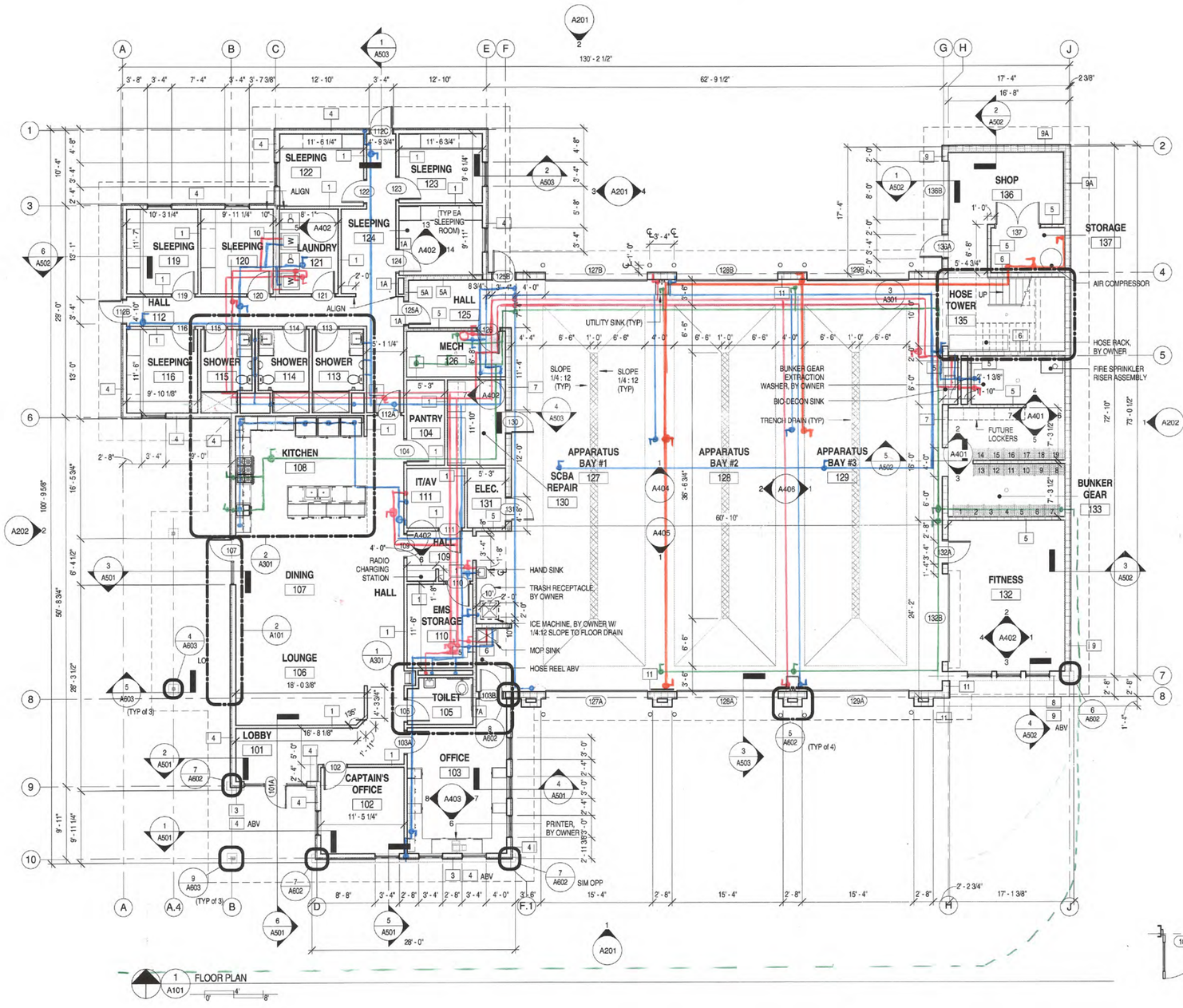
CONTRACT: Orchard Mesa Fire Station
2884 B½ Road
Grand Junction, CO 81503

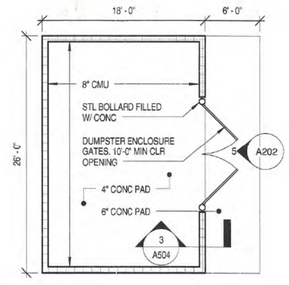
SHEET DESCRIPTION: 215179
DRAWING NO. FP-1

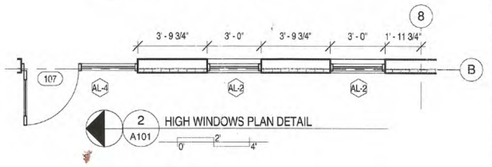
GENERAL NEW CONSTRUCTION NOTES

1. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT PRIOR TO CONTINUING CONSTRUCTION.
2. ITEMS NOT NOTED ON THE DRAWINGS SHALL BE CONSIDERED THE SAME AS NOTED ITEMS WHICH ARE GRAPHICALLY REPRESENTED IN THE SAME MANNER.
3. PROVIDE TREATED SOLID WOOD BLOCKING FOR ALL WALL EQUIPMENT, TOILET ACCESSORIES, MILLWORK AND OTHER WALL MOUNTED ITEMS.
4. CONTRACTOR SHALL CAULK AT THE INTERFACE OF INTERIOR FACES OF DOOR FRAMES WITH ADJACENT MATERIALS THOUGH JOINT MAY NOT BE VISIBLE.
5. PROVIDE TRANSITION STRIPS BETWEEN FLOOR MATERIALS OF DISSIMILAR HEIGHTS. CENTER TRANSITION STRIPS UNDER DOORS OR OTHER PLACES OUT OF SIGHT.
6. PROVIDE POSITIVE SLOPE ON ALL FLOOR DRAINS MINIMUM 0F1/8" : 12". SLOPE FLOOR ALL AROUND FROM ADJACENT WALLS TO FLOOR DRAINS, DO NOT DEPRESS ONLY THE AREA IMMEDIATELY AROUND THE DRAIN.
7. REFER TO THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR THE LOCATIONS OF PIPING, VENTS, DUCTS, CURBS, FANS AND OTHER ITEMS WHICH PENETRATE THE ROOF PLANE.
8. DOOR JAMB LOCATION OFF FACE OF WALL IS 4", TYPICAL, UNLESS NOTED OTHERWISE.

- Compressed Air
- Domestic Hot Water / Recirc.
- Domestic Cold Water
- Natural gas







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CHAMBERLIN ARCHITECTS

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www.chamberlinarchitects.com

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

FLOOR PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CDs

DRAWN BY: JW CHECKED BY: Checker

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443

A101

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4/13/2015 11:58:37 AM
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MECHANICAL LEGEND

GENERAL SYMBOLS

- SA-1 — EQUIPMENT DESIGNATION (REFER TO SCHEDULES AND SPECIFICATIONS)
- A / M-1 — SECTION INDICATOR; A = SECTION DESIGNATION, M-1 = SHEET DESIGNATION
- 1 — KEYED NOTE DESIGNATION
- 1 — DRAWING REVISION DESIGNATION

PIPING

- CWR — CHILLED WATER RETURN
- CWS — CHILLED WATER SUPPLY
- COLD WATER
- CA — COMPRESSED AIR
- D — INDIRECT DRAIN
- HOT WATER - DOMESTIC
- 110 — HOT WATER - DOMESTIC, TEMPERATURE SHOWN
- HOT WATER CIRCULATING - DOMESTIC
- HWR — HEATING WATER RETURN
- HWS — HEATING WATER SUPPLY
- G — NATURAL GAS
- NO — NITROUS OXIDE
- O — OXYGEN
- OST — OVERFLOW STORM DRAIN PIPING
- SS — SANITARY SEWER
- SANITARY VENT
- SWR — SNOWMELT RETURN
- SWS — SNOWMELT SUPPLY
- ST — STORM DRAIN PIPING
- V — VACUUM
- WASTE
- ELBOW
- ELBOW UP
- ELBOW DOWN
- TEE
- TEE UP
- TEE DOWN

PIPING ACCESSORIES

- GATE OR GLOBE VALVE
- BALL VALVE
- CHECK VALVE
- SOLENOID VALVE
- BUTTERFLY VALVE
- RELIEF VALVE
- BALANCING VALVE, CALIBRATED
- ANGLE VALVE, GATE OR GLOBE
- UNION
- CONTROL VALVE, 2-WAY
- CONTROL VALVE, 3-WAY
- P-T PORT
- STRAINER
- THERMOMETER IN PIPELINE
- PRESSURE REGULATING VALVE
- HOSE BIBB
- PRESSURE GAUGE
- HORIZONTAL CLEANOUT
- FLOOR CLEANOUT
- TWO-WAY CLEANOUT
- FLOOR DRAIN OR SHOWER DRAIN
- FLOOR SINK

DUCTWORK

- 22"x18" — RETURN OR EXHAUST DUCT DOWN, DIMENSION ACROSS LISTED FIRST
- SUPPLY DUCT DOWN
- RETURN OR EXHAUST DUCT UP
- SUPPLY DUCT UP
- 22"x10" — DUCT ELBOW, DIMENSION OF SIDE SHOWN = 22"
- 22"x10" — DUCT, DIMENSION OF SIDE SHOWN = 22"
- FLEXIBLE DUCT CONNECTION
- MANUAL VOLUME DAMPERS IN DUCTS
- RA-1 12"x8" — SIDEWALL RETURN OR EXHAUST GRILLE RA-1, 12"Wx8"H
- SA-1 12"x8" 225 CFM — SIDEWALL SUPPLY GRILLE OR REGISTER SA-1, 12"Wx8"H, 225 CFM
- RA-1 12"x8" — CEILING RETURN GRILLE OR REGISTER RA-1, 24"x24", 225 CFM
- SA-1 24"x24" 225 CFM — CEILING SUPPLY DIFFUSER, GRILLE, OR REGISTER SA-1, 24"x24", 225 CFM
- F — FIRE DAMPER
- F/S — COMBINATION FIRE/SMOKE DAMPER
- MOTORIZED CONTROL DAMPER IN DUCT

CONTROLS

- T — THERMOSTAT OR TEMPERATURE SENSOR
- H — HUMIDISTAT OR HUMIDITY SENSOR
- TT — DUCT THERMOSTAT OR TEMPERATURE SENSOR
- HT — DUCT HUMIDISTAT OR HUMIDITY SENSOR

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BDD	BACK DRAFT DAMPER
BFG	BELOW FINISHED GRADE
CA	COMPRESSED AIR
CFM	CUBIC FEET PER MINUTE
COTG	CLEANOUT TO GRADE
CW	COLD WATER - DOMESTIC
DB	DRY BULB TEMPERATURE
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
FCO	FLOOR CLEANOUT
°F	DEGREES FAHRENHEIT
HW	HOT WATER - DOMESTIC
HWC	HOT WATER CIRCULATING - DOMESTIC
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
LB	POUNDS (WEIGHT)
MFR	MANUFACTURER
NIC	NOT IN CONTRACT
NK	NECK
NTS	NOT TO SCALE
OBD	OPPOSED BLADE DAMPER
RA	RETURN AIR
RDL	ROOF DRAIN LEADER
SA	SUPPLY AIR
SDL	STORM DRAIN LEADER
SS	SANITARY SEWER
SWR	SNOWMELT WATER RETURN
SWS	SNOWMELT WATER SUPPLY
V	VENT
VTR	VENT THROUGH ROOF
WCO	WALL CLEANOUT
W	WASTE
WB	WET BULB TEMPERATURE

AIR COOLED CONDENSING UNIT SCHEDULE

TAG	FURNACE	MANUFACTURER	MODEL	COOLING MBH	SST °F	AMBIENT °F	POWER REQUIRED V/PH/HZ	MCA	MOCP	CONTROLS	WEIGHT LBS	NOTES
CU-1	FR-1	CARRIER	24ANB148A0030	40.0	-	105	208-230/1/60	28.4	40	- 16 SEER	325	1, 2
CU-2	FR-2	CARRIER	24ANB124A0030	20.0	-	105	208-230/1/60	14.3	20	- 19.7 SEER	323	1, 2

SCHEDULE NOTES:
1. LISTED CAPACITIES ARE AT 4800 FT ALTITUDE UNLESS INDICATED OTHERWISE.
2. PROVIDE SPECIFIED EQUIPMENT OR APPROVED EQUIVALENT BY OTHER MANUFACTURER.
3. COOLER THERMOSTAT SHALL BE DIAL MANUFACTURING, INC MODEL 7617 OR EQUIVALENT.S

FURNACE SCHEDULE

TAG	AREA SERVED	MANUFACTURER	MODEL	BLOWER DATA CFM	E.S.P. INCH W.C.	HP	COOLING COIL MODEL	SENSIBLE MBH	EAT db/wb °F	HEATING CAPACITY OUTPUT (MINIMUM) MBH	STAGES	POWER REQUIRED V/PH/HZ	AMPACITY	MOCP	CONTROLS	WEIGHT LBS	NOTES / ACCESSORIES
FR-1	COMMON AREAS	CARRIER	59TP5 080-20	1850	0.7	1	CNPVP4824A#A	40.6	75 / 54	63	2	115/1/60	15.5	20	ZONE TEMPERATURE CONTROL SYS	160	REFER TO SPECIFICATIONS, NOTES 1 AND 2
FR-2	SLEEPING & ADJACENT	CARRIER	59TP5 060-14	1000	1.0	3/4	CNPVP3117A#A	19.1	75 / 54	47	2	115/1/60	12.4	15	ZONE TEMPERATURE CONTROL SYS	146	REFER TO SPECIFICATIONS, NOTES 1 AND 2

MINI SPLIT SYSTEM SCHEDULE

TAG	AREA SERVED	MANUF.	MODEL	NET TOTAL COOLING CAP. MBH (SEA LEVEL)	COOLING SEER	HEATING CAP. MBH	HEATING COP	POWER REQUIRED V/PH//HZ	UNIT MCA	UNIT MOCP	CONTROLS	WEIGHT LBS	ACCESSORIES	NOTES
HP-1 A & B	FITNESS 132	DAIKIN	FTXS15LVJU AND RXS15LVJU	15	20.6	18	4	208-230/1/60	13.75	20	WIRED T'STAT	OUTDOOR = 104, INDOOR = 31	-	1, 2
SS-1 A & B	I T / A V 111	DAIKIN	FCQ18PAVJU AND RZR18PVJU	18	17.2	NONE	-	208-230/1/60	16.5	20	WIRED T'STAT	OUTDOOR = 150, INDOOR = 43	INTEGRAL CONDENSATE PUMP	1, 2

EVAPORATIVE COOLER SCHEDULE

TAG	AREA SERVED	MANUFACTURER	MODEL	TYPE	AIR FLOW & EXT. P. CFM	IN. W.C.	FAN MOTOR HP	POWER REQUIRED V / PH / HZ	FLA	MEDIA TYPE	ACCESSORIES	CONTROLS	WEIGHT LBS.	NOTES
EC-1	APPARATUS BAYS	CHAMPION COOLER	SAS 10012	ROOF MOUNTED DOWN DRAFT	4000	0.5	3/4	115/1/60	13.8	CORRUGATED 12"	PURGE PUMP AND TSTAT	REFER TO SPECIFICATIONS	560	1, 2, 3, SINGLE SPEED MOTOR
EC-2	APPARATUS BAYS	CHAMPION COOLER	SAS 10012	ROOF MOUNTED DOWN DRAFT	4000	0.5	3/4	115/1/60	13.8	CORRUGATED 12"	PURGE PUMP AND TSTAT	REFER TO SPECIFICATIONS	560	1, 2, 3, SINGLE SPEED MOTOR
EC-1 (ALT #)	APPARATUS BAYS	BREEZAIR	EXT 265	ROOF MOUNTED DOWN DRAFT	3800	0.33	3/4	115/1/60	8.7	CORRUGATED	SALINITY MANAGER AND TSTAT	REFER TO SPECIFICATIONS	200	1, 2, 3
EC-2 (ALT #)	APPARATUS BAYS	BREEZAIR	EXT 265	ROOF MOUNTED DOWN DRAFT	3800	0.33	3/4	115/1/60	8.7	CORRUGATED	SALINITY MANAGER AND TSTAT	REFER TO SPECIFICATIONS	200	1, 2, 3

EXHAUST FAN SCHEDULE

TAG	AREA SERVED	MANUFACTURER	MODEL	TYPE	AIR FLOW CFM	IN. W.C.	MOTOR HP OR W	SOUND dBA	SONES	POWER REQUIRED V / PH / HZ	FLA	ACCESSORIES	CONTROLS	WEIGHT LBS.	NOTES
EF-1	SHOWER 115	COOK	GC-186	CEILING CENTRIFUGAL	110	0.5	54 W	44	2.5	115/1/60	-	REFER TO SPECIFICATIONS	MOTION DETECTING LIGHT SWITCH	15	1, 2
EF-2	SHOWER 114	COOK	GC-186	CEILING CENTRIFUGAL	110	0.5	54 W	44	2.5	115/1/60	-	REFER TO SPECIFICATIONS	MOTION DETECTING LIGHT SWITCH	15	1, 2
EF-3	SHOWER 113	COOK	GC-186	CEILING CENTRIFUGAL	110	0.5	54 W	44	2.5	115/1/60	-	REFER TO SPECIFICATIONS	MOTION DETECTING LIGHT SWITCH	15	1, 2
EF-4	TOILET 105	COOK	GC-186	CEILING CENTRIFUGAL	90	0.5	35 W	42	2.5	115/1/60	-	REFER TO SPECIFICATIONS	MOTION DETECTING LIGHT SWITCH	15	1, 2
EF-5	BUNKER GEAR 133	COOK	GN-186	IN LINE CENTRIFUGAL	170	0.75	69 W	51	4.5	115/1/60	-	REFER TO SPECIFICATIONS	WALL SWITCH	15	1, 2
EF-6	SHOP 136	COOK	GC-622	CEILING CENTRIFUGAL	300	0.5	0.083 HP	44	2.5	115/1/60	-	REFER TO SPECIFICATIONS	WALL SWITCH	35	1, 2
EF-7	STORAGE 137	COOK	GC-146	CEILING CENTRIFUGAL	50	0.5	26 W	43	2.0	115/1/60	-	REFER TO SPECIFICATIONS	THERMOSTAT	15	1, 2
EF-8	KITCHEN 108 HOOD	COOK	ACRUD-HP 150RH15D	ROOF UPBLAST DIRECT DRIVE	600	0.75	0.16 HP	54	7.4	115/1/60	-	REFER TO SPECIFICATIONS	SPPED CONTROL PROVIDED WITH HOOD	100	1, 2
EF-9	HOSE TOWER 135	COOK	GC-622	CEILING CENTRIFUGAL	420	0.25	0.083 HP	45	3.0	115/1/60	-	REFER TO SPECIFICATIONS	HUMIDISTAT	35	1, 2

INFRARED HEATER SCHEDULE

TAG	AREA SERVED	MANUFACTURER	MODEL	TYPE	HEATING CAPACITY INPUT, MBH (SEA LEVEL)	HEATING STAGES	POWER REQUIRED V / PH / HZ	FLA	CONTROLS	WEIGHT LBS	NOTES
IR-1 THROUGH IR-4	APPARATUS BAYS	SUPERIOR RADIANT PRODUCTS	UA 60 20 FT	LOW INTENSITY TUBULAR	60	1	115/1/60	1.0	THERMOSTAT INSTALLED BY ELECTRICAL CONTRACTOR	120	TUBE LENGTH = 20 FT. NOTE 2

LOUVER SCHEDULE

TAG	SERVICE	TYPE	MOUNTING	FINISH	ACCESSORIES	RUSKIN MODEL	SIZE	NOTES
LR-1	EXHAUST	STATIONARY, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	1/2" MESH SCREEN	ELF375X	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-2	EXHAUST	STATIONARY, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	1/2" MESH SCREEN	ELF375X	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-3	EXHAUST	BRICK VENT, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	18X16 MESH SCREEN	BV100	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-4	EXHAUST	BRICK VENT, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	18X16 MESH SCREEN	BV100	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-5	EXHAUST	BRICK VENT, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	18X16 MESH SCREEN	BV100	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-6	OUTSIDE AIR	STATIONARY, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	1/2" MESH SCREEN	ELF375X	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-7	OUTSIDE AIR	STATIONARY, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	1/2" MESH SCREEN	ELF375X	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2
LR-8	EXHAUST	BRICK VENT, EXTRUDED ALUMINUM	WALL	COLOR CHOSEN BY ARCHITECT	18X16 MESH SCREEN	BV100	AS NOTED ON PLANS	REFER TO SPECIFICATIONS / NOTE 2

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

TAG	SERVICE	TYPE	MOUNTING	THROW PATTERN	FINISH	ACCESSORIES	KRUEGER SERIES #	SIZE	NOTES
SA-1	SUPPLY AIR	DIFFUSER, ROUND NECK, SINGLE FACEPLATE	CEILING, T-BAR	4-WAY	BRITISH WHITE	-	PLQ-23	AS NOTED ON PLANS	STEEL, 24"x24"
SA-2	SUPPLY AIR	DIFFUSER, ROUND NECK, SINGLE FACEPLATE	CEILING, PLASTER FRAME	4-WAY	BRITISH WHITE	PLASTER FRAME	PLQ-23	AS NOTED ON PLANS	STEEL, LAY INTO PLASTER FRAME, 12"x12"
SA-3	SUPPLY AIR	SUPPLY DIFFUSER, RECTANGULAR NECK	DUCT	4-WAY	BRITISH WHITE	-	5SHPC-F23	AS NOTED ON PLANS	V BORDER, ALUMINUM, ADJUSTABLE VERTICAL THROW
TA-1	TRANSFER AIR	GRILLE, RECTANGULAR, ADJUSTABLE BLADES	SIDEWALL SURFACE	SINGLE DEFLECTION	BRITISH WHITE	-	80V-F23	AS NOTED ON PLANS	STEEL, VERTICAL BLADES, 3/4" CENTERS
RA-1	RETURN AIR	GRILLE, 1/2" CUBE CORE	CEILING, T-BAR, FRAMED	N/A	BRITISH WHITE	-	EG5-FTB	AS NOTED ON PLANS	ALUMINUM
RA-2	RETURN AIR	GRILLE, 1/2" CUBE CORE	CEILING, GYP, FRAMED	N/A	BRITISH WHITE	-	EGC5-F22	AS NOTED ON PLANS	ALUMINUM
EA-1	EXHAUST AIR	GRILLE, 1/2" CUBE CORE	CEILING, T-BAR, FRAMED	N/A	BRITISH WHITE	-	EG5-FTB	AS NOTED ON PLANS	ALUMINUM

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

MECHNICAL SCHEDULES AND LEGEND

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015

PROJECT NO: 1443

SHEET NO: M001

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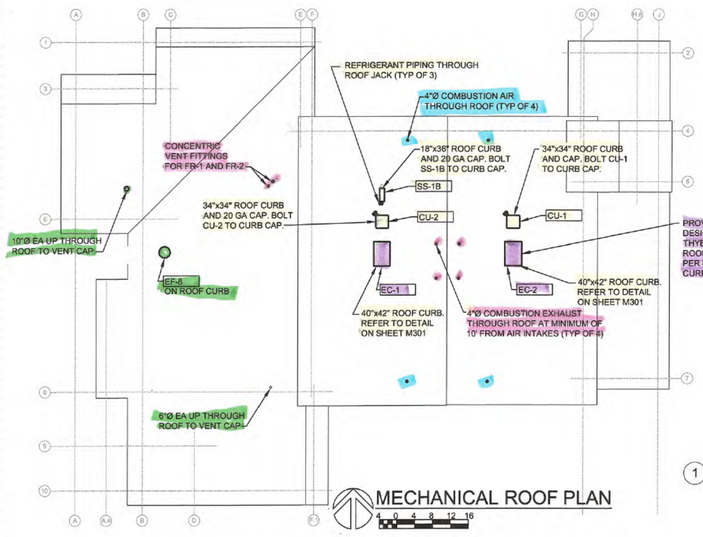
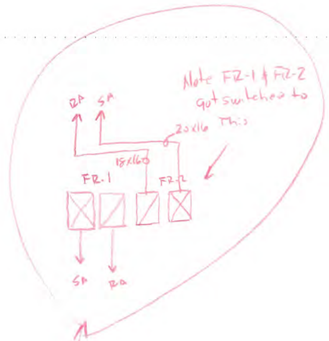


Thybar



GENERAL NOTES

THE MECHANICAL CONTENT OF THIS DRAWING IS DIAGRAMMATIC AND NOT NECESSARILY TO SCALE.

THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO LOCATIONS OF DUCTWORK, EQUIPMENT PIPING, AND SUPPORTS IN ORDER TO COORDINATE WITH BUILDING CONSTRUCTION AND WORK OF OTHER TRADES.

ALL BRANCH DUCTS SERVING ONE DIFFUSER OR EXHAUST GRILLE SHALL INCLUDE A VOLUME DAMPER AT THE BRANCH DUCT POINT OF ORIGIN, UNLESS THE GRILLE OR DIFFUSER HAS BEEN SPECIFIED TO INCLUDE A BALANCING DAMPER.

BRANCH DUCTS SERVING SINGLE DIFFUSERS SHALL BE SIZED TO MATCH THE DIFFUSER NECK SIZE UNLESS OTHERWISE INDICATED.

INDICATED DUCT DIMENSIONS ARE SHEET METAL DIMENSIONS.

RETURN GRILLES SHALL BE TYPE RA-1, 24"x12", UNLESS INDICATED OTHERWISE.

REFER TO SCHEDULES AND SPECIFICATIONS FOR EQUIPMENT AND MATERIALS OF CONSTRUCTION.

ROUND DUCTS ARE INDICATED USING SINGLE LINE.

DUCTS ASSOCIATED WITH FURNACES FR-1 AND FR-2 SHALL BE LOCATED BELOW ROOF TRUSSES.

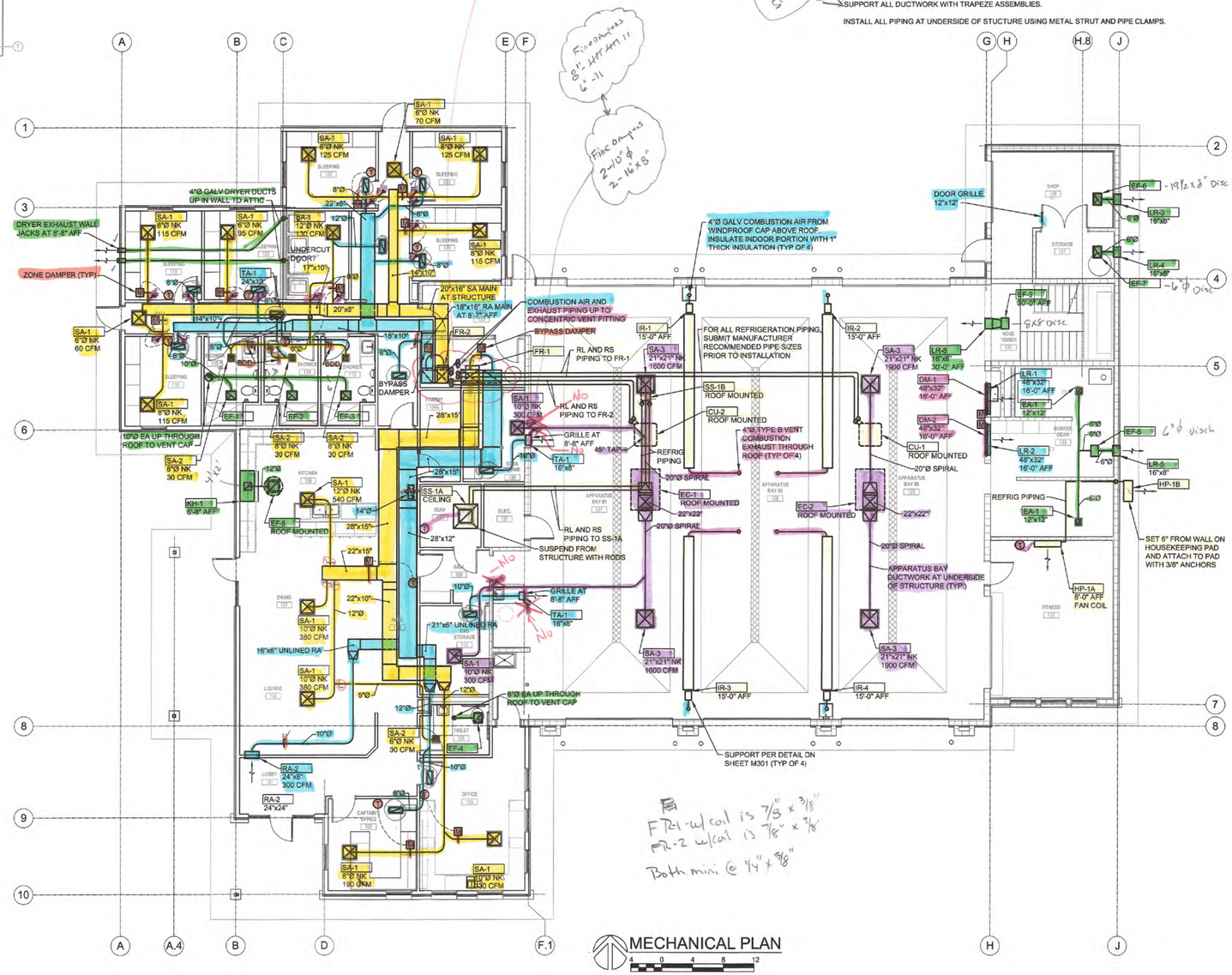
FOR ALL REFRIGERATION PIPING, SUBMIT MANUFACTURER RECOMMENDED PIPE SIZES FOR APPROVAL PRIOR TO INSTALLATION.

EQUIPMENT AND DUCTWORK SHALL BE SUPPORTED AND BRACED IN COMPLIANCE WITH ASCE STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

SUPPORT ALL DUCTWORK WITH TRAPEZE ASSEMBLIES.

INSTALL ALL PIPING AT UNDERSIDE OF STUCTURE USING METAL STRUT AND PIPE CLAMPS.

See Addendum #1



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24
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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

MECHANICAL PLAN

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015 SHEET NO.

PROJECT NO: 1443 **M101**

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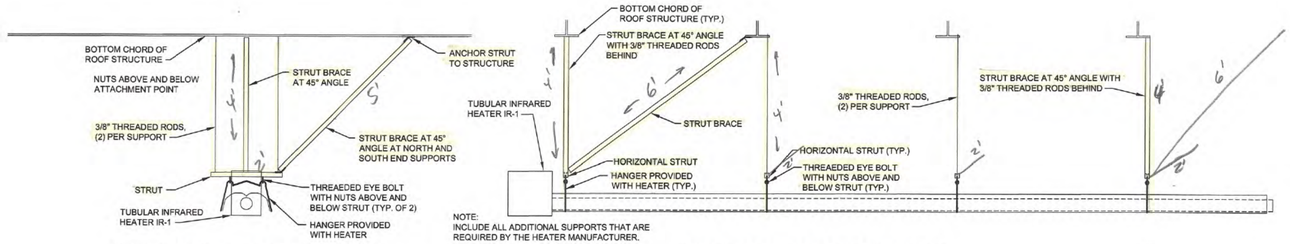
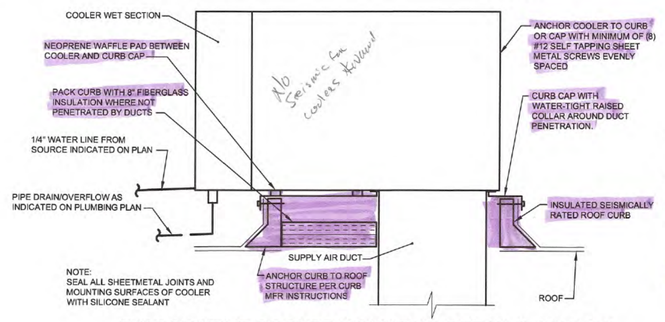


TUBULAR INFRARED HEATER SUPPORT DETAIL SOUTH ELEVATION

SCALE: 1/2" = 1'-0"

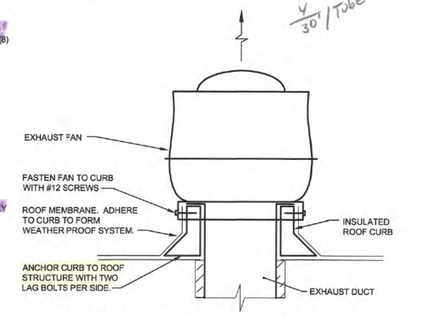
TUBULAR INFRARED HEATER SUPPORT DETAIL EAST ELEVATION

SCALE: 1/2" = 1'-0"



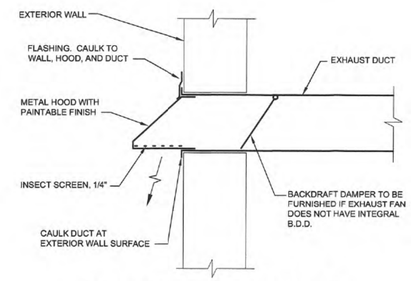
EVAPORATIVE COOLER MOUNTING DETAIL (BASE BID)

NO SCALE



ROOF MOUNTED EXHAUST FAN DETAIL

NO SCALE



EXHAUST WALL JACK DETAIL

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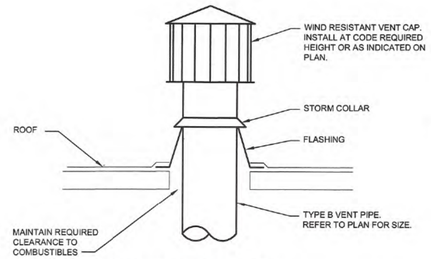
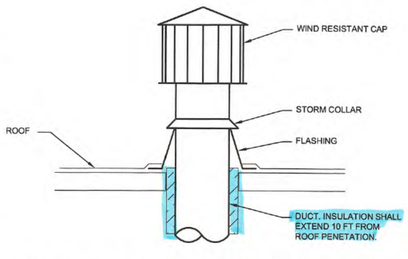


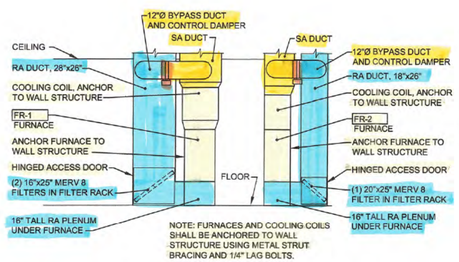
COMBUSTION VENT THROUGH ROOF DETAIL

NO SCALE



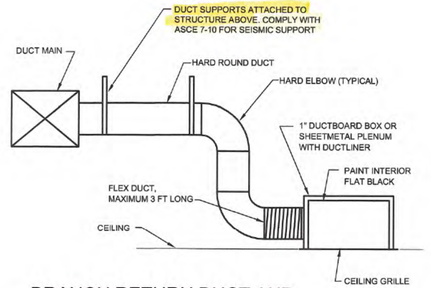
COMBUSTION AIR INTAKE AND GENERAL EXHAUST THROUGH ROOF DETAIL

NO SCALE



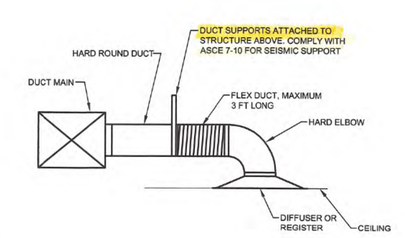
FURNACE DUCT AND FILTER INSTALLATION DETAIL

SCALE: 1/4" = 1'-0"



BRANCH RETURN DUCT AND CEILING GRILLE INSTALLATION DETAIL

NO SCALE



BRANCH SUPPLY DUCT INSTALLATION DETAIL

NO SCALE

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

MECHNICAL DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015 SHEET NO: M301

PROJECT NO: 1443

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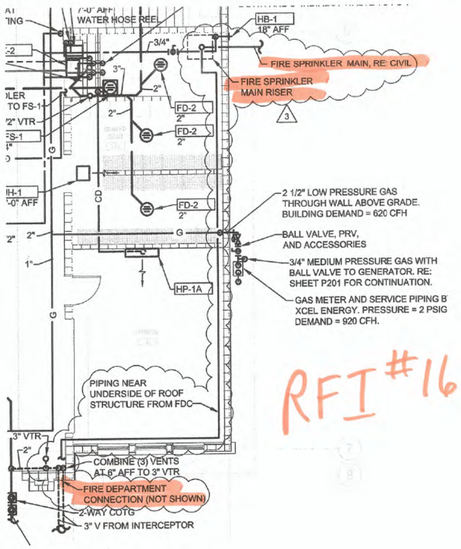
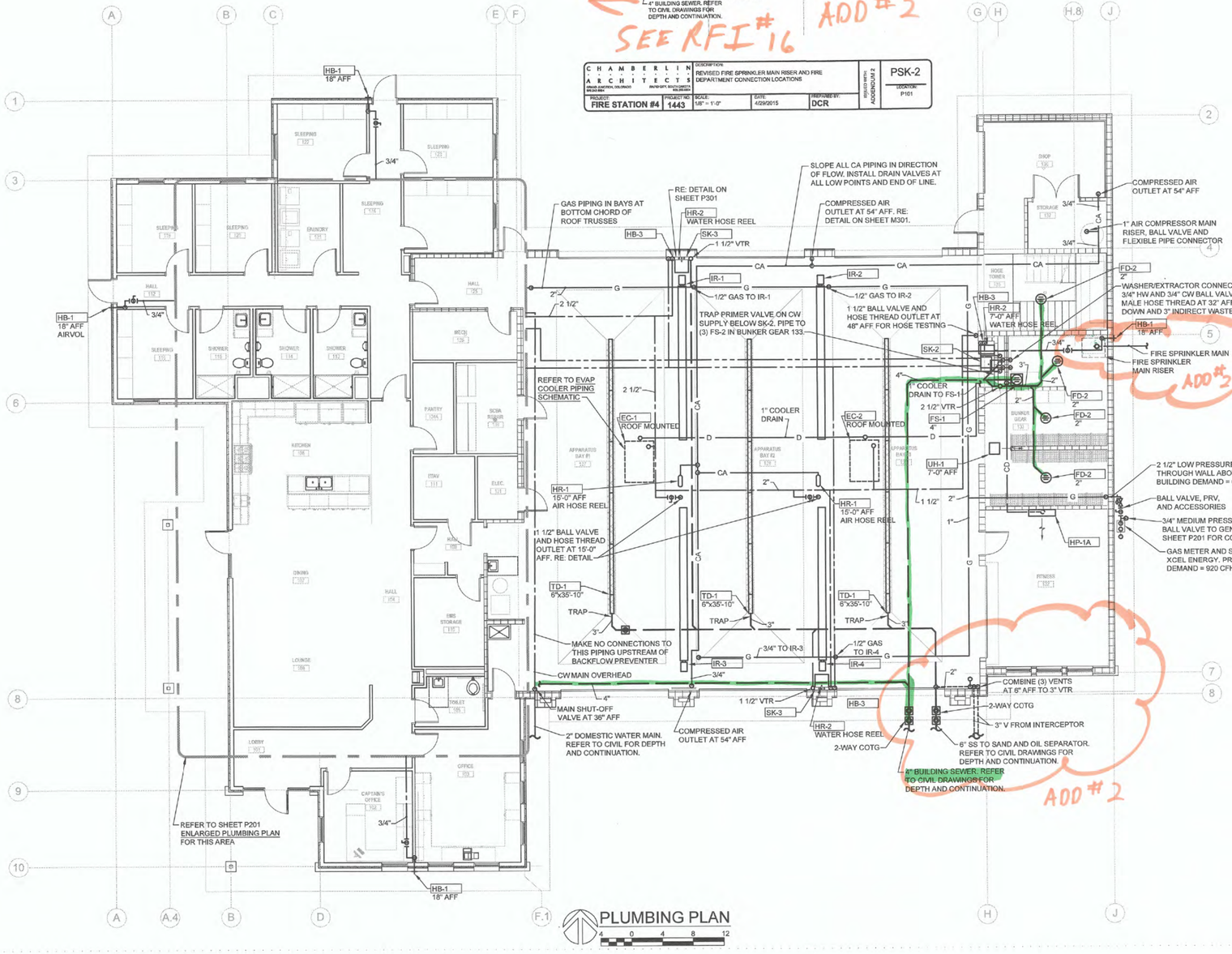
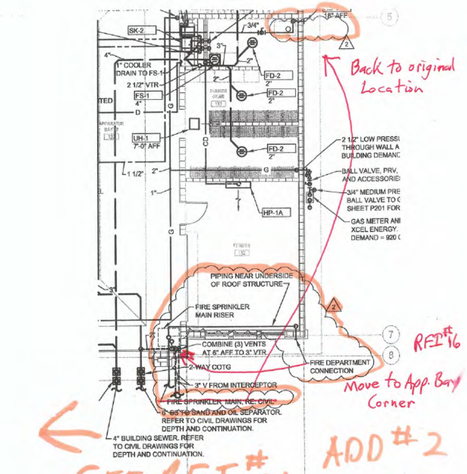


CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.335.8604)	DESCRIPTION: SECOND REVISION TO FIRE SPRINKLER MAIN RISER AND FIRE DEPARTMENT CONNECTION LOCATIONS	ISSUED WITH: PR10	PSK-3 LOCATION: P101
PROJECT: FIRE STATION #4	PROJECT NO: 1443	SCALE: 1/8" = 1'-0"	DATE: 7/28/2015	PREPARED BY: DCR



PLUMBING PLAN



CHAMBERLIN ARCHITECTS (GRAND JUNCTION, COLORADO 970.242.6804 / RAPID CITY, SOUTH DAKOTA 605.335.8604)	DESCRIPTION: REVISED FIRE SPRINKLER MAIN RISER AND FIRE DEPARTMENT CONNECTION LOCATIONS	ISSUED WITH: ADDENDUM 2	PSK-2 LOCATION: P101
PROJECT: FIRE STATION #4	PROJECT NO: 1443	SCALE: 1/8" = 1'-0"	DATE: 4/29/2015	PREPARED BY: DCR

GENERAL NOTES

THE MECHANICAL CONTENT OF THIS DRAWING IS DIAGRAMMATIC AND NOT NECESSARILY TO SCALE.

THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO LOCATIONS OF DUCTWORK, EQUIPMENT, PIPING, AND SUPPORTS IN ORDER TO COORDINATE WITH BUILDING CONSTRUCTION AND WORK OF OTHER TRADES.

REFER TO SCHEDULES AND SPECIFICATIONS FOR EQUIPMENT AND MATERIALS OF CONSTRUCTION.

INSTALL WASTE PIPING CLEANOUTS WHERE INDICATED AND AS REQUIRED BY 2012 INTERNATIONAL PLUMBING CODE.

WATER PIPING SHALL BE INSTALLED TIGHT TO BOTTOM CHORD OF ROOF TRUSSES AND MUST BE COORDINATED WITH DUCTWORK INSTALLATION DUE TO SEVERELY LIMITED SPACE ABOVE CEILINGS.

EQUIPMENT AND PIPING SHALL BE SUPPORTED AND BRACED IN COMPLIANCE WITH ASCE STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

ALL HORIZONTAL PIPING IN APPARATUS BAYS SHALL BE SUPPORTED AT UNDERSIDE OF ROOF STRUCTURE USING METAL STRUT AND PIPING CLAMPS. PROVIDE SHIMS TO ACHIEVE PROPER SLOPE.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

PLUMBING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443 **P101**

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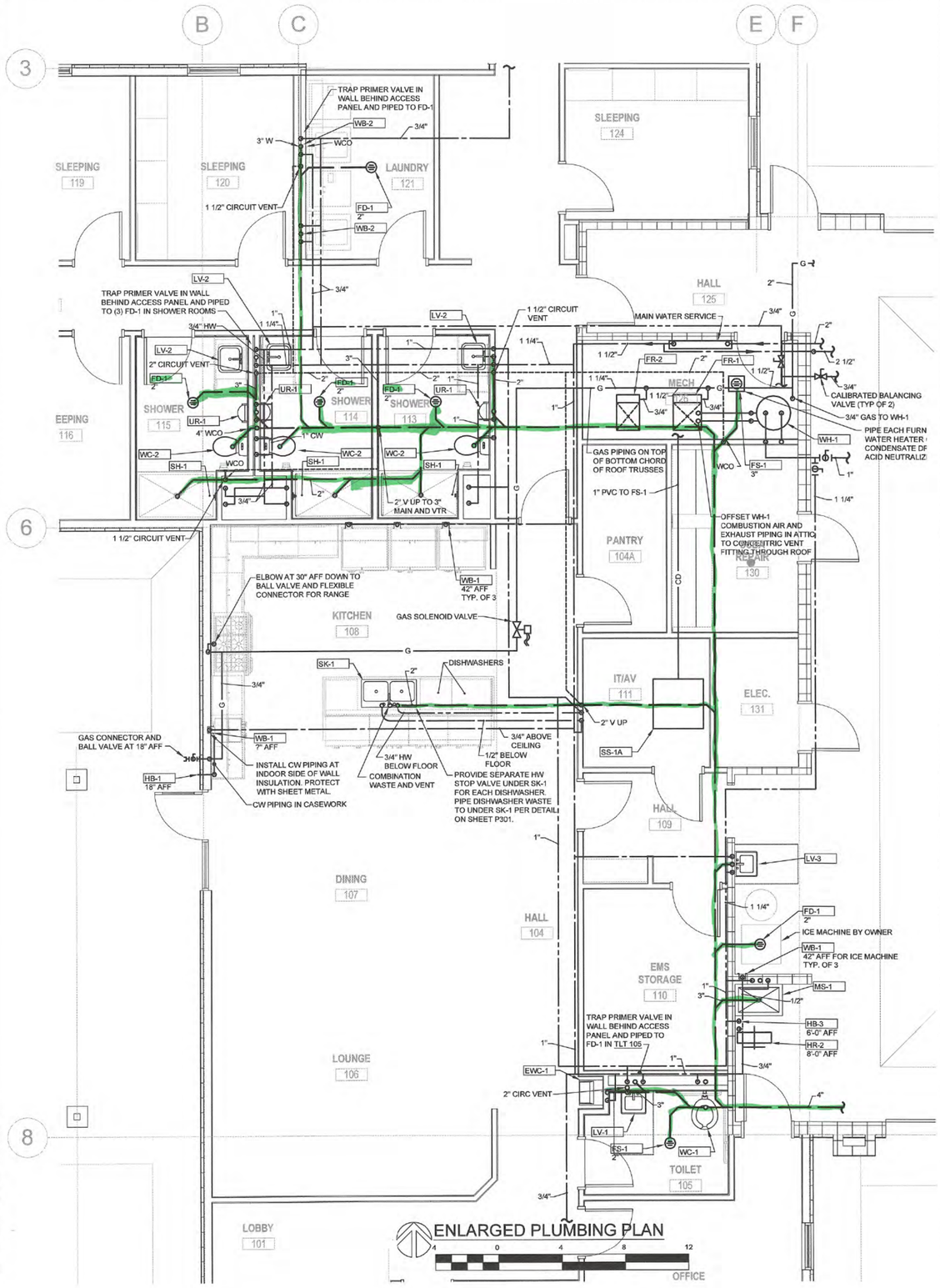

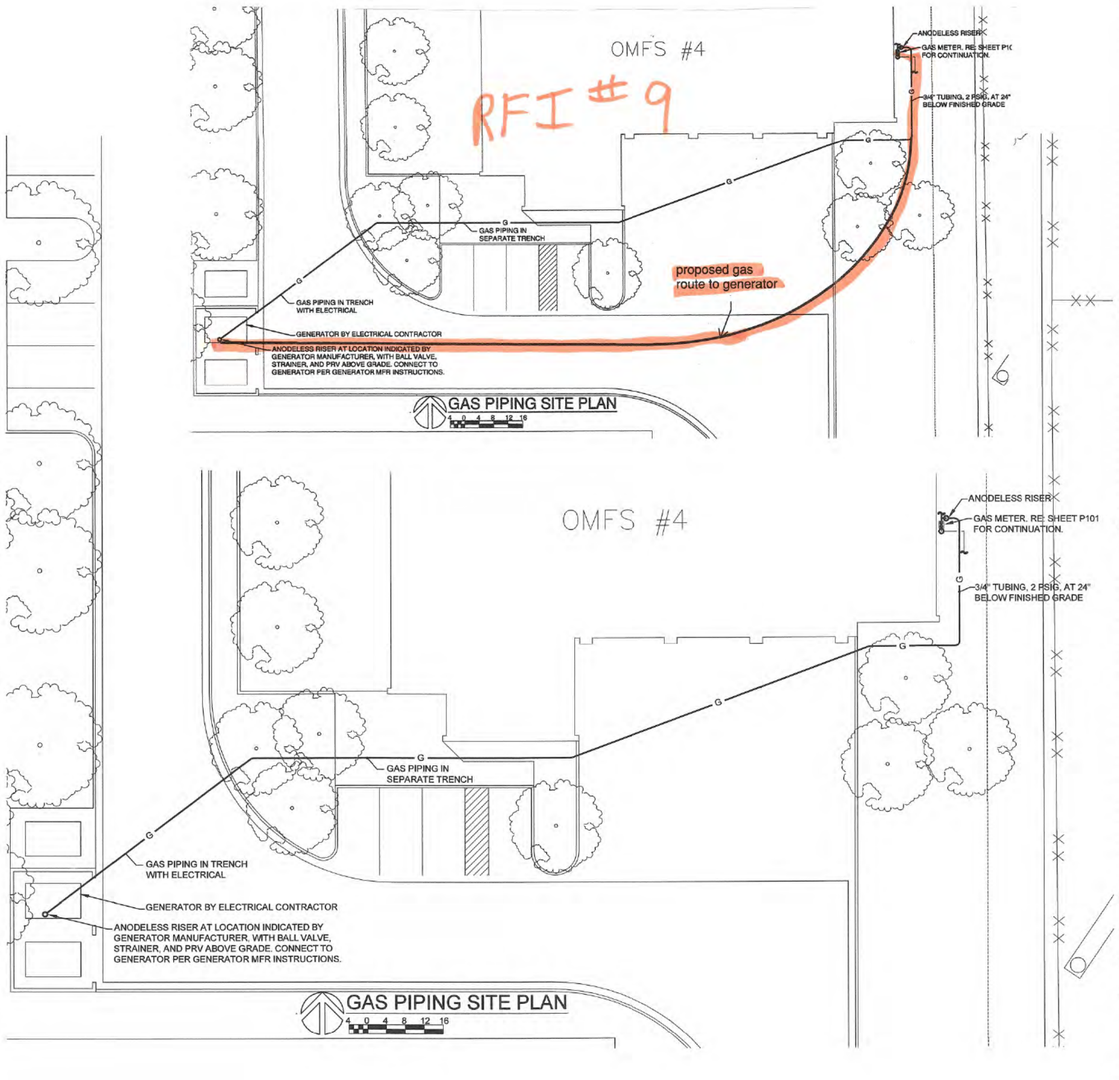

GENERAL NOTES

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INSTALL WASTE PIPING CLEANOUTS WHERE INDICATED AND AS REQUIRED BY 2012 INTERNATIONAL PLUMBING CODE.

WATER PIPING SHALL BE INSTALLED TIGHT TO BOTTOM CHORD OF ROOF TRUSSES AND MUST BE COORDINATED WITH DUCTWORK INSTALLATION DUE TO SEVERELY LIMITED SPACE ABOVE CEILINGS.

EQUIPMENT AND PIPING SHALL BE SUPPORTED AND BRACED IN COMPLIANCE WITH ASCE STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

ALL OVERHEAD HORIZONTAL PIPING GAS PIPING SHALL BE IN ATTIC AND SHALL BE SUPPORTED FROM ROOF STRUCTURE USING METAL STRUT AND PIPING CLAMPS.

ALL OVERHEAD HORIZONTAL WATER PIPING SHALL BE SUPPORTED AT UNDERSIDE OF ROOF STRUCTURE USING METAL STRUT AND PIPING CLAMPS.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

ENLARGED PLUMBING PLAN AND GAS PIPING SITE PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: 04/10/2015

PROJECT NO: 1443

SHEET NO: P201

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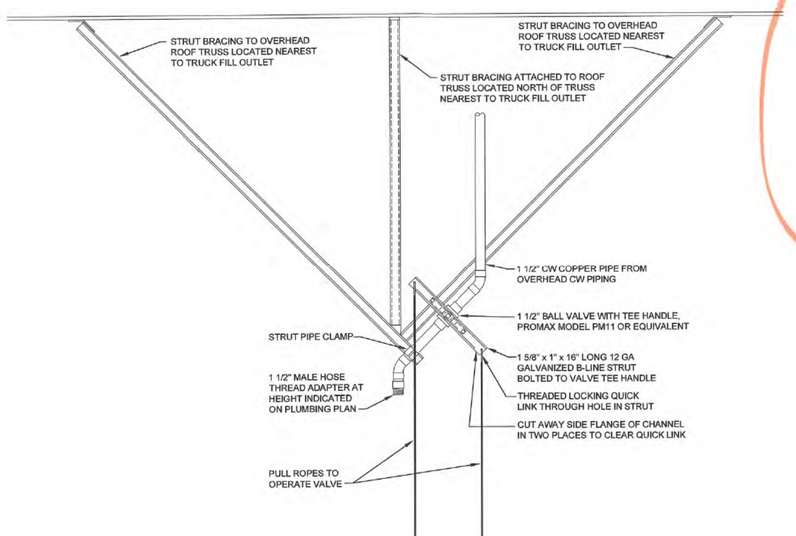
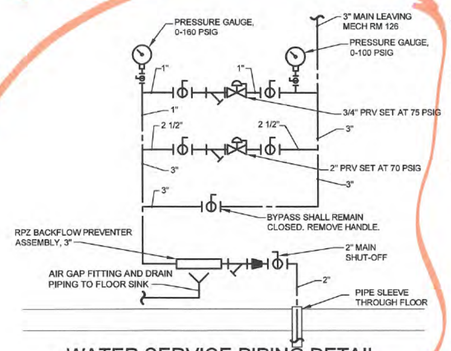
SEE ADD#1



TRUCK FILL WATER VALVE DETAIL

SCALE: 1" = 1'-0"



WATER SERVICE PIPING DETAIL

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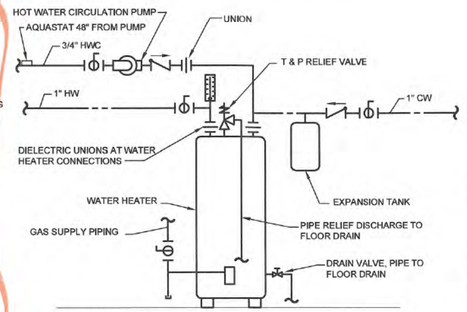

GAS WATER HEATER PIPING DETAIL

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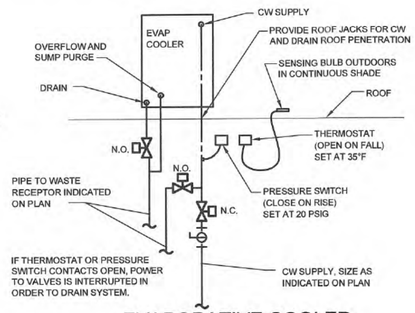

EVAPORATIVE COOLER PIPING SCHEMATIC

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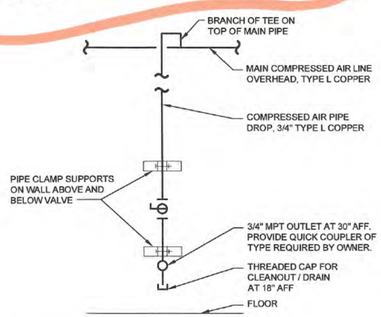

COMPRESSED AIR DROP DETAIL

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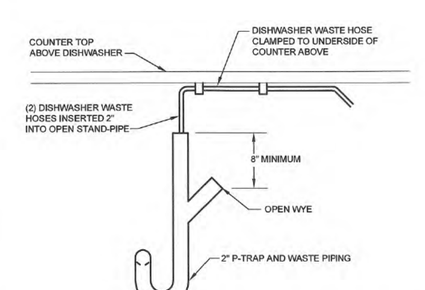

DISHWASHER WASTE CONNECTION DETAIL

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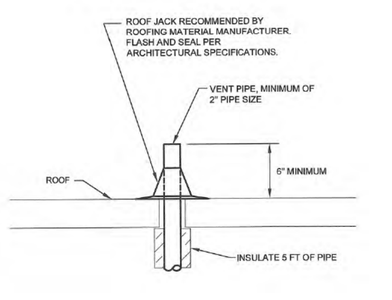

VENT THROUGH ROOF DETAIL

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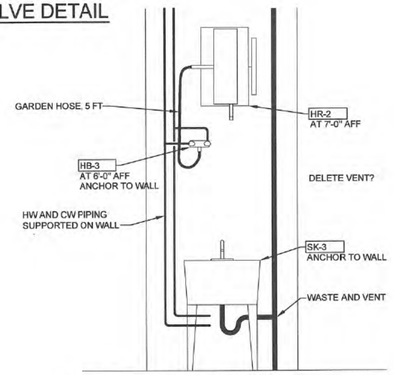
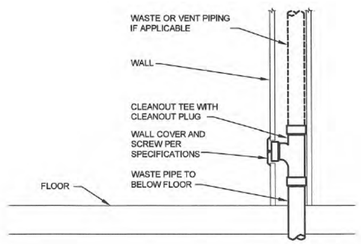
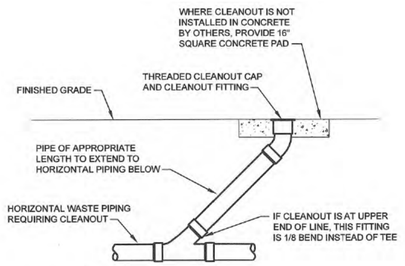


SK-3 AND HR-2 PIPING DETAIL

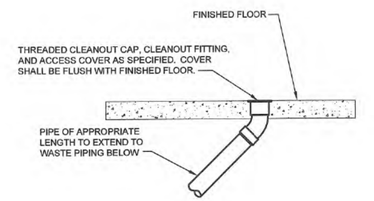
SCALE: 1/2" = 1'-0"



WALL CLEANOUT (W.C.O.) DETAIL

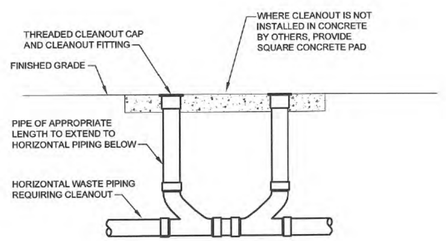


CLEANOUT TO GRADE (C.O.T.G.) DETAIL



FLOOR CLEANOUT (F.C.O.) DETAIL

NO SCALE



TWO-WAY CLEANOUT TO GRADE DETAIL

NO SCALE

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

PLUMBING DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS:
CONSTUCTION DOCUMENTS

DRAWN BY: DCR CHECKED BY:

DATE: **04/10/2015**

PROJECT NO: **1443**

SHEET NO: **P301**

2012 CHAMBERLIN ARCHITECTS

ELECTRICAL LEGEND

SERVICE ENTRANCE

- M — UTILITY METER, MH = 5'-0" TO TOP
- MT — TELEPHONE TERMINAL, MH = 4'-6" TO CENTER
- PAD MOUNTED TRANSFORMER
- MDC — MAIN DISTRIBUTION CENTER

EQUIPMENT

- 30 — CONTACTOR, 30 = AMPERE RATING, MH = 4'-6" TO TOP
- MAGNETIC MOTOR STARTER, MH = 4'-6" TO TOP
- F — FUSED DISCONNECT, MH = 4'-6" TO TOP
- U — UNFUSED DISCONNECT, MH = 4'-6" TO TOP
- ENCLOSED CIRCUIT BREAKER
- M — MOTOR
- L1A — PANELBOARD, L1A = DESIGNATION, 5'-9" TO TOP
- PC — PHOTOCELL
- TC — TIME CLOCK, MH = 4'-6" TO TOP
- MS — COMBINATION MOTOR STARTER, MH = 4'-6" TO TOP
- T — THERMOSTAT, MH = 4'-6" TO CENTER
- H — HUMIDISTAT, MH = 4'-6" TO CENTER

ABBREVIATIONS

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BC	BELOW CEILING
BKR	BREAKER
C	CEILING
DC	DEDICATED CIRCUIT
DD	DUSK TO DAWN
DTO	DUSK TO TIMED OFF
EM	SWITCHED EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EN	NON-SWITCHED EMERGENCY
EX	EXISTING
G	GROUND FAULT CURRENT INTERRUPTER
GRC	GALVANIZED RIGID CONDUIT
GRD	GROUND
IG	ISOLATED GROUND
J	JUNCTION BOX
K	KEY OPERATED SWITCH
L	SWITCH WITH PILOT LIGHT
LA	LIGHTING ARRESTOR
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
O	OCCUPANCY SENSING SWITCH
PVC	POLYVINYL CHLORIDE
R	MOTOR RATED SWITCH
W	WEATHERPROOF
WG	WEATHERPROOF/GFIC

GENERAL SYMBOLS

- AC-1 — EQUIPMENT, AC-1 = DESIGNATION - SEE SCHEDULE
- 1 — FLAG NOTE
- 1 — REVISION
- 12 — ROOM NUMBER
- A / E1 — SECTION MARK, A = SECTION DESIGNATION, E1 = REFERENCE DRAWING

OUTLETS MH = 1'-6" TO CENTER

- 8 — DUPLEX RECEPTACLE, 8 = CIRCUIT NUMBER (TYPICAL), SEE DEVICE SCHEDULE FOR SPECIFICATION
- FOURPLEX RECEPTACLE
- SPECIAL - SEE DEVICE SCHEDULE
- a — SPLIT WIRED RECEPTACLE, a = SWITCH DESIGNATION
- J — JUNCTION BOX - CEILING OR FLOOR
- J — JUNCTION BOX - WALL
- TNC — MULTI-PORT SIGNAL, 2T - TWO TELEPHONE PORTS, 3N - THREE NETWORK PORTS, 4C - FOUR COAXIAL CABLE PORTS
- C — CEILING RECEPTACLE
- SINGLE RECEPTACLE

CONDUIT

- P1-7 — CONCEALED ABOVE GRADE, P1-7 = PANEL & CIRCUIT, HACHURES = # OF WIRES
- UNDER FLOOR/UNDERGROUND
- UNDERGROUND DUCTBANK
- FLEX
- P1-7 — HOME RUN, P1-7 = PANEL & CIRCUIT, HACHURES = # OF WIRES
- TURNING UP
- TURNING DOWN
- BUSHED OR CAPPED CONDUIT
- SR — SURFACE RACEWAY

LIGHTING FIXTURES

- b / 1 — FLUORESCENT - LENSED, 1 = CIRCUIT DESIGNATION, b = SWITCH DESIGNATION, HALF SHADED = EMERGENCY
- FLUORESCENT - OPEN
- CEILING MOUNTED WALLWASHER
- CEILING MOUNTED DOWNLIGHT
- WALL BRACKET, MH - SEE PLANS
- POLE MOUNTED - SINGLE
- POLE MOUNTED - DOUBLE

SWITCHES MH = 3'-10" TO CENTER

- $b — SINGLE POLE SWITCH, b = SWITCH DESIGNATION, SEE DEVICE SCHEDULE FOR SPECIFICATION
- $ — TWO POLE SWITCH
- THREE WAY SWITCH
- FOUR WAY SWITCH
- DIMMER SWITCH
- SINGLE PUSHBUTTON STATION
- SINGLE PUSHBUTTON STATION
- OCCUPANCY SWITCH - CEILING
- OCCUPANCY SWITCH - WALL

FIRE ALARM SYSTEM

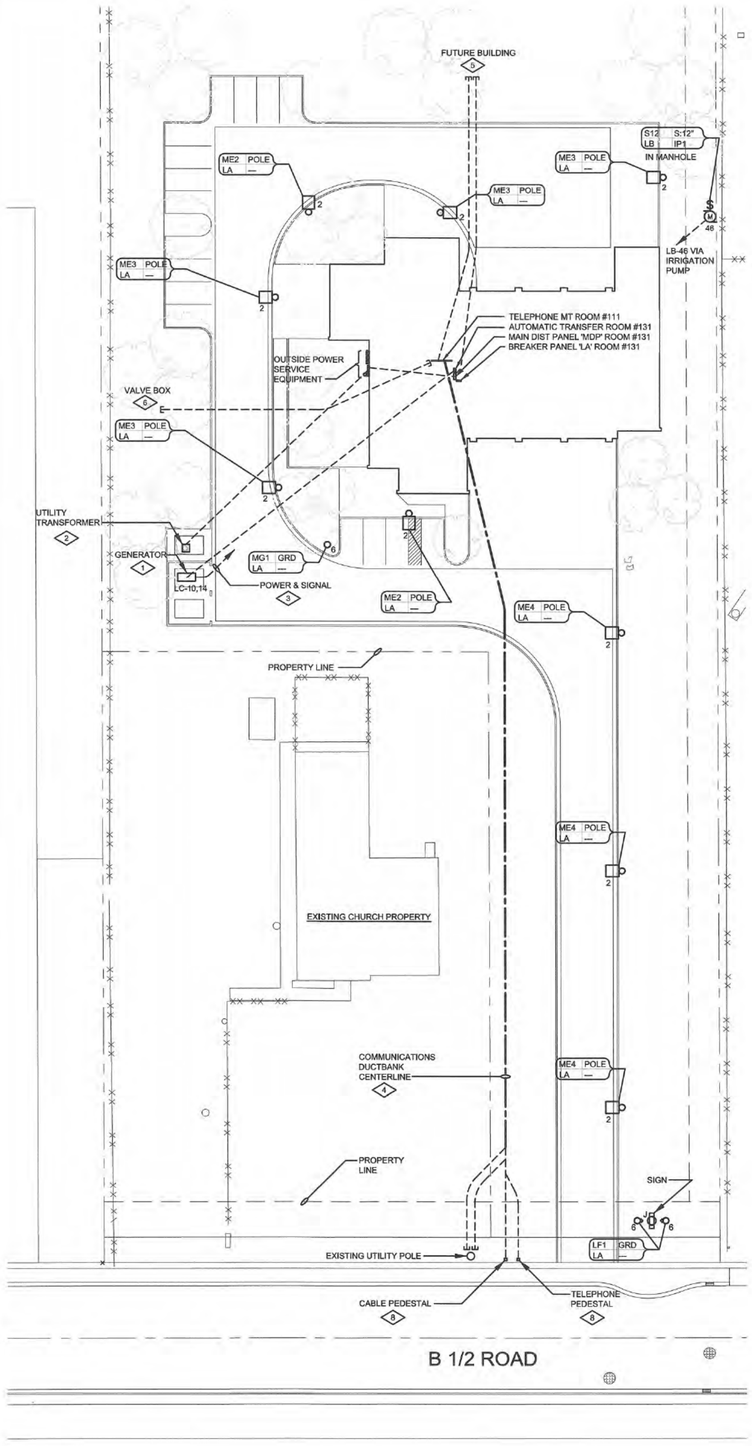
- FM — MASTER PANEL, MH = 5'-6" TO TOP
- FA — ANNUNCIATOR PANEL, MH = 5'-6" TO TOP
- 60 — HORN/STROBE COMBINATION, MH = 7'-6" TO CENTER, 60 = CP (15 CP IS DEFAULT)
- 60 — STROBE, MH = 7'-6" TO CENTER, 60 = CP (15 CP IS DEFAULT)
- F — PULL STATION, MH = 3'-10" TO CENTER
- S — IONIZATION SMOKE DETECTOR
- S — PHOTOELECTRIC SMOKE DETECTOR
- 135 °F — THERMAL DETECTOR - 135 DEGREES
- 200 °F — THERMAL DETECTOR - 200 DEGREES
- R — REMOTE RED INDICATOR LIGHT, MH = WALL 7'-6" TO CENTER OR CEILING
- DUCT SMOKE DETECTOR
- AN — ANSUL EQUIPMENT
- DH — MAGNETIC DOOR HOLDER
- DC — DOOR CLOSER
- SPRINKLER SYSTEM FLOW SWITCH
- SPRINKLER VALVE TAMPER SWITCH
- F/S — FIRE/SMOKE DAMPER

LIGHTNING PROTECTION/GROUNDING SYSTEM

- EXOTHERMIC CONNECTION
- GROUND ROD
- AIR TERMINAL
- MASTER GROUND BAR
- CONCRETE ENCASED RE-RAR GROUND (UFER)
- EXPOSED COPPER GROUND
- UNDERGROUND COPPER GROUND

ONE LINE DIAGRAM

- 2-2"PVC, 3 #4/0, THW - AL, 1 #4 GRD, THW - CU — FEEDER, CONDUIT #, SIZE & MATERIAL, NUMBER & SIZE OF Ø & N, INSULATION & CONDUCTOR, GROUND SIZE (IF USED), INSULATION & CONDUCTOR
- M — METER
- LP1 — PANELBOARD - SEE SCHEDULE, LP1 = DESIGNATION
- CURRENT TRANSFORMER
- 60/3, 12, 50 KTNR — FUSED SWITCH, 60 AMP 3 POLE FRAME, DEVICE # 12, 50 AMP KTNR FUSE
- 60/3, 12 — UNFUSED SWITCH, 60 AMPS 3 POLE, DEVICE # 12
- 60/3, 12 — CIRCUIT BREAKER, 60 AMPS 3 POLE, DEVICE # 12
- G — GENERATOR
- 30/2 — AUTOMATIC TRANSFER SWITCH, 30/2 = AMPERE RATING/POLES

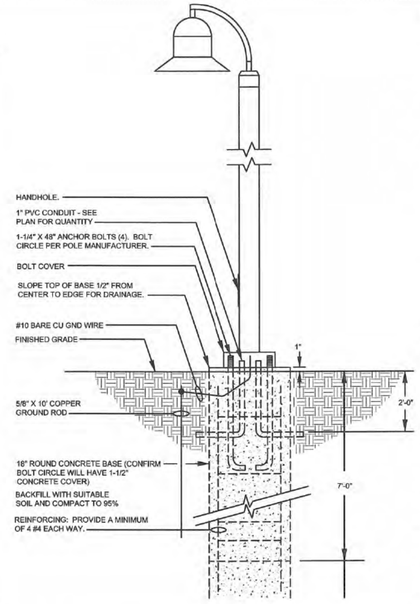


SITE PLAN

SCALE: 1" = 30'-0"

0 7.5 15 30 60 75

NORTH



BASE "ME2", "ME3" & "ME4"

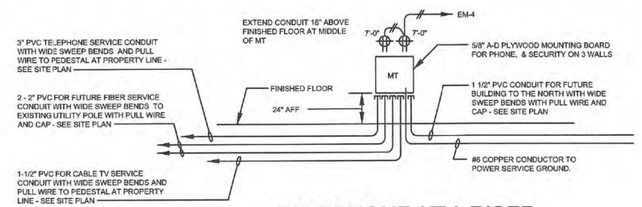
NO SCALE

GENERAL SITE NOTES:

1. PROVIDE A SEPARATE GREEN INSULATED GROUND WIRE SIZED PER NATIONAL ELECTRICAL CODE TABLE 250.122 IN ALL BRANCH CIRCUIT AND FEEDER RACEWAYS CONTAINING POWER CONDUCTORS. GROUND WIRE IS NOT INCLUDED IN HACHURE COUNT ON DRAWINGS.
2. ALL RACEWAYS INSTALLED UNDERGROUND, OR UNDER THE BUILDING SHALL BE NO SMALLER THAN 3/4". ALL CONDUCTORS INSTALLED UNDERGROUND OR UNDER THE BUILDING SHALL BE NO SMALLER THAN #12.
3. WHERE 208 VOLT BRANCH CIRCUITS EXCEED 75', INCREASE WIRE SIZE TO #10, AND INCREASE RACEWAY SIZE TO 1".
4. UNDERGROUND CONDUITS SHALL BE RUN IN A COMMON TRENCH AS MUCH AS POSSIBLE. POWER AND SIGNAL CONDUITS SHALL BE SEPARATED A MINIMUM OR 12". MAJOR CONDUIT RUNS ARE SHOWN ON THIS PLAN. SEE BUILDING PLANS FOR ADDITIONAL SITE BRANCH CIRCUITS.
5. ALL CONDUITS SHALL BE BURIED A MINIMUM OF 36" BELOW FINISHED GRADE. BED CONDUITS 6" BELOW AND 6" ABOVE IN LOCAL MATERIAL WITH NO ROCKS LARGER THAN 1" IN DIAMETER, OR IMPORT SAND IF ACCEPTABLE LOCAL MATERIAL IS UNAVAILABLE. PLACE WARNING TAPE 1'-0" ABOVE ALL BURIED CONDUITS. SEE L-LINE DIAGRAM FOR FEEDER CONDUIT SIZES. SEE SIGNAL RISERS FOR COMMUNICATION CONDUIT SIZES.
6. SEE SPECIFICATIONS FOR ADDITIONAL CONSTRAINTS ON POWER AND COMMUNICATIONS SERVICES, AND OUTSIDE BRANCH CIRCUITS AND FEEDERS.

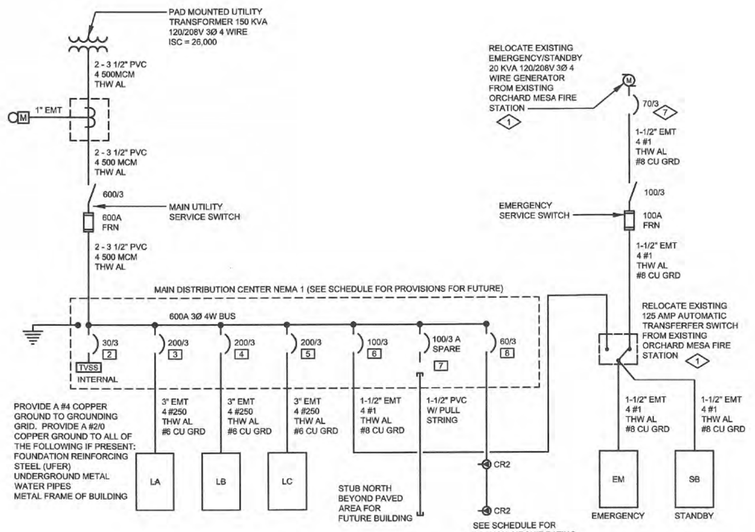
NOTES REFERENCED ON THE PLANS:

1. RELOCATE EXISTING GENERATOR AND AUTOMATIC TRANSFER SWITCH FROM OLD ORCHARD MESA FIRE STATION. RECONNECT GENERATOR FOR 3Ø OUTPUT. ADD THIRD POLE TO AUTOMATIC TRANSFER SWITCH. ORIENT GENERATOR SO THAT AIR DISCHARGE FACES THE OPEN OF THE ENCLOSURE. LOCATE CONDUIT STUB UPS PER EXISTING GENERATOR.
2. ORIENT UTILITY TRANSFORMER SO THAT THE TERMINAL COMPARTMENT HAS A MINIMUM OF 8' CLEARANCE FOR HOT STICK OPERATIONS. LOCATE CONDUIT STUB UPS PER UTILITY COMPANY REQUIREMENTS.
3. PROVIDE 3/4" PVC TO GENERATOR EMERGENCY STOP. PROVIDE 3/4" PVC TO PANEL 'LC' FOR GENERATOR BATTERY CHARGER AND BLOCK HEATER. PROVIDE 3/4" PVC TO THE AUTOMATIC TRANSFER SWITCHES FOR THE GENERATOR START SIGNAL.
4. PROVIDE 3" TELEPHONE CONDUIT, 1-1/2" CABLE SERVICE CONDUIT AND (2)-2" CONDUITS FOR FUTURE FIBER OPTIC CABLES.
5. STUB 1 1/2" PVC POWER AND SIGNAL CONDUITS NORTH OF THE BUILDING FOR FUTURE STORAGE BUILDING.
6. STUB 1-1/2" CONDUIT FROM SPRINKLER CONTROLLER IN IT ROOM TO VALVE BOX OUTSIDE THE BUILDING. COORDINATE LOCATION OF VALVE BOX WITH SPRINKLER SYSTEM INSTALLER.
7. REPLACE 90 AMP 2 POLE GENERATOR OUTPUT BREAKER WITH 70 AMP 3 POLE.
8. CONFIRM PEDESTAL LOCATIONS WITH UTILITY COMPANIES PRIOR TO RUNNING CONDUIT.



TELEPHONE / TV RISER

NO SCALE



ONE LINE DIAGRAM

NO SCALE

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LEGEND, SITE PLAN, ONE LINE & DETAILS

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO: E101

PROJECT NO: 1443/140330

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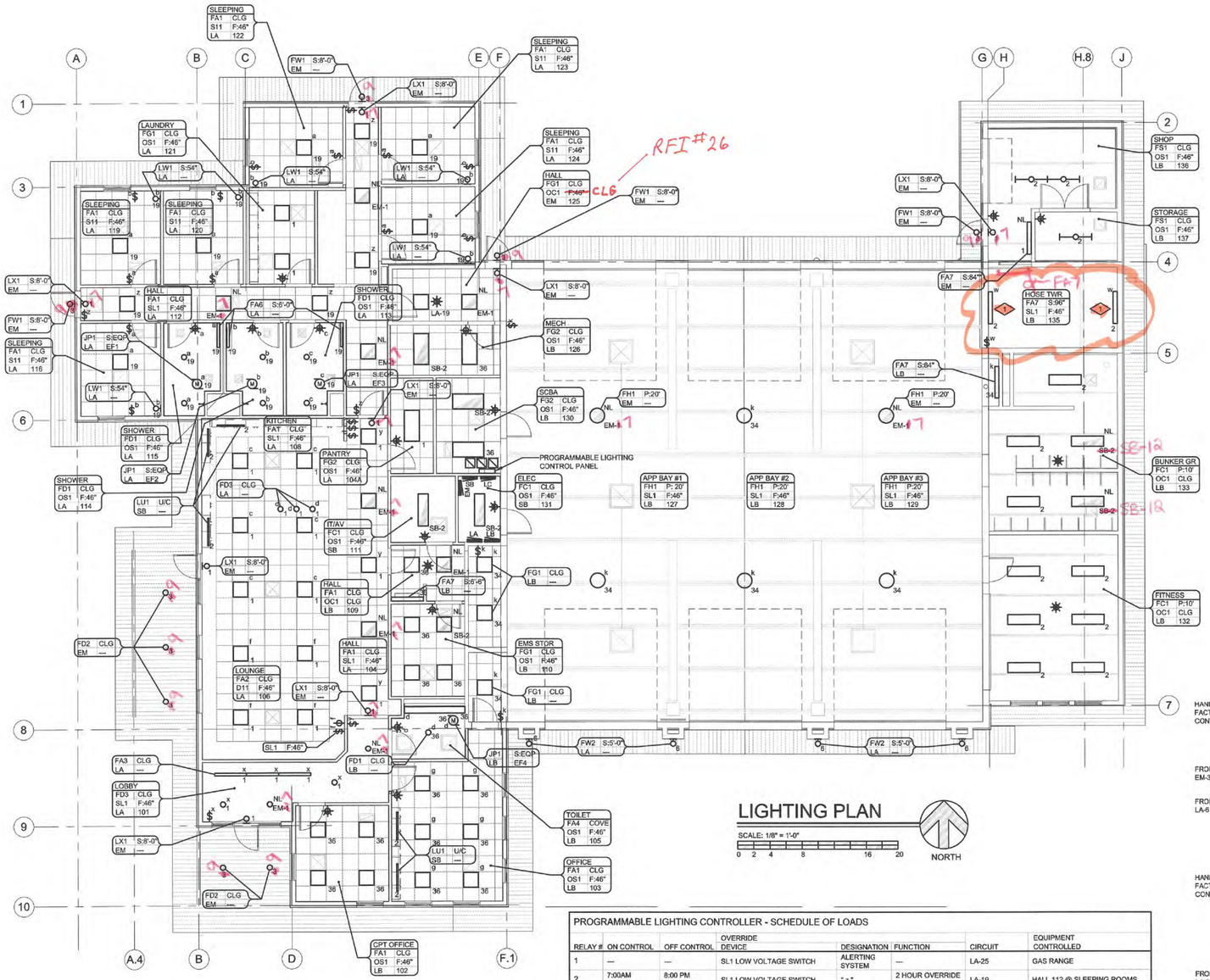


LIGHTING PLAN

SCALE: 1/8" = 1'-0"

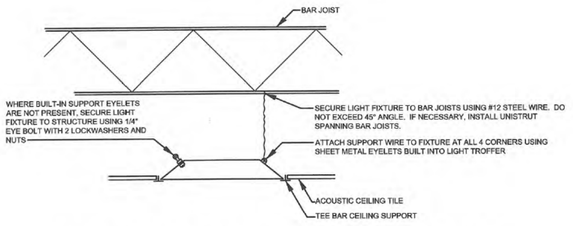
0 2 4 8 16 20

NORTH

PROGRAMMABLE LIGHTING CONTROLLER - SCHEDULE OF LOADS

RELAY #	ON CONTROL	OFF CONTROL	OVERRIDE DEVICE	DESIGNATION	FUNCTION	CIRCUIT	EQUIPMENT CONTROLLED
1	—	—	SL1 LOW VOLTAGE SWITCH	ALERTING SYSTEM	—	LA-25	GAS RANGE
2	7:00AM MON-SUN	8:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" z "	2 HOUR OVERRIDE ON/OFF	LA-19	HALL 112 @ SLEEPING ROOMS
3	7:00AM MON-SUN	10:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" y "	2 HOUR OVERRIDE ON/OFF	LA-1	HALL 104 @ KITCHEN & DINING
4	7:00AM MON-SUN	6:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" x "	2 HOUR OVERRIDE ON/OFF	LA-1	LOBBY
5	7:00AM MON-SUN	8:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" k "	2 HOUR OVERRIDE ON/OFF	EM-1	APPARATUS BAY LIGHTING
6	—	6:00 PM MON-SUN	—	" w "	2 HOUR OVERRIDE ON/OFF	LB-2	HOSE TOWER LIGHTS
7	DUSK	DAWN	—	—	—	LA-6	EXTERIOR LIGHTING DUSK TO DAWN (BUILDING)
8	DUSK 6:00 AM	10:00 PM MON-SUN	—	—	—	LA-2	PARKING LOT LIGHTING DUSK TO TIMED OFF
9	DOOR OPENS ON ALARM	—	ALERTING SYSTEM	—	—	SB-1	APPATATUS BAY DOOR
10	DOOR OPENS ON ALARM	—	ALERTING SYSTEM	—	—	SB-3	APPATATUS BAY DOOR
11	DOOR OPENS ON ALARM	—	ALERTING SYSTEM	—	—	SB-5	APPATATUS BAY DOOR
12	DUSK	10:00 PM	ALERTING SYSTEM	—	—	LA-2	ENTRY DRIVE TYPE 'ME4' LIGHTS
13	—	10:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" c "	ON/OFF	LA-1	KITCHEN LIGHTS
14	—	10:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" d "	ON/OFF	LA-1	KITCHEN LIGHTS
15	—	12:00 PM MON-SUN	SL1 LOW VOLTAGE SWITCH	" f "	ON/OFF	LA-1	LOUNGE
16	SPARE	—	—	—	—	—	—

CONFIRM SCHEDULE WITH OWNER BEFORE PROGRAMMING CONTROLLER



SEISMIC SUPPORT OF LIGHT TROFFERS

NO SCALE

GENERAL LIGHTING NOTES:

1 PROVIDE A SEPARATE GREEN INSULATED GROUND WIRE SIZED PER NATIONAL ELECTRICAL CODE TABLE 250.122 IN ALL BRANCH CIRCUIT AND FEEDER RACEWAYS CONTAINING POWER CONDUCTORS. GROUND WIRE IS NOT INCLUDED IN HACHURE COUNT ON DRAWINGS.

2 REVIEW ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO INSTALLATION OF LIGHT FIXTURES. CALL ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER.

3 FIXTURE MOUNTING HEIGHTS SHOWN ON THE PLANS TAKE PRECEDENCE OVER DEFAULT MOUNTING HEIGHTS SHOWN IN THE LEGEND.

4 ALL LIGHT SWITCHES ARE TO BE INSTALLED FLUSH UNLESS OTHERWISE INDICATED.

5 THE MOUNTING HEIGHT OF WALL MOUNTED LIGHTING FIXTURES IS THE DISTANCE FROM THE FINISHED FLOOR TO THE BOTTOM OF THE LIGHTING FIXTURE DIFFUSER OR REFLECTOR. DETERMINE THE BOX HEIGHT FROM THE LIGHTING FIXTURE MOUNTING HEIGHT AND THE LIGHTING FIXTURE DIMENSIONS.

6 THE MOUNTING HEIGHT OF CORD, CHAIN, PENDANT, OR AIRCRAFT CABLE SUPPORTED LIGHTING FIXTURES IS THE DISTANCE FROM THE FINISHED FLOOR TO THE BOTTOM OF THE LIGHTING FIXTURE DIFFUSER OR REFLECTOR. DETERMINE CORD, CHAIN, PENDANT, OR AIRCRAFT CABLE LENGTH FROM THE LIGHTING FIXTURE MOUNTING HEIGHT, LIGHTING FIXTURE DIMENSIONS, AND THE CEILING HEIGHT.

7 THE FOLLOWING MAIN KEY DEFINES LIGHTING FIXTURES IN THE ROOM LISTED. ALL FIXTURES IN THIS SPACE ARE TO COMPLY WITH THIS MAIN KEY UNLESS OVERRIDDEN BY A TAG.

ROOM NAME
FIXTURE DESIGNATION - SEE LIGHTING FIXTURE SCHEDULE
PANEL DESIGNATION
OFFICE FG1 CLG PP1 1000
LIGHT FIXTURE MOUNTING FLUSH OR SURFACE: HEIGHT
ROOM NUMBER

8 THE FOLLOWING TAG DEFINES LIGHTING FIXTURES WHICH ARE DIFFERENT FROM THOSE DEFINED IN THE MAIN KEY. THIS TAG OVERRIDES THE MAIN KEY FOR THE LIGHTING FIXTURE INDICATED AND SIMILARLY SHAPED LIGHTING FIXTURES IN THIS SPACE.

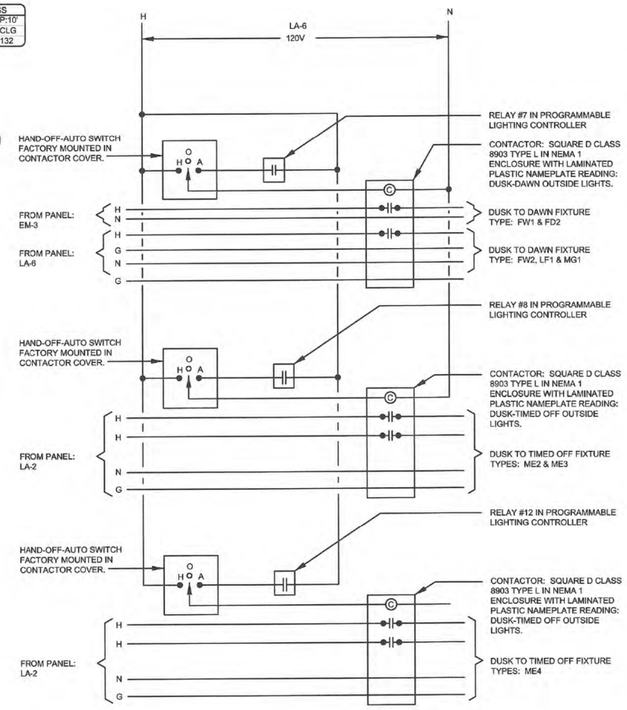
FIXTURE DESIGNATION - SEE SCHEDULE
PANEL DESIGNATION
FG1 F:46" PP1 7
FIXTURE MOUNTING FLUSH OR SURFACE: HEIGHT
TYPICAL NUMBER OF THIS TYPE OF LIGHTING FIXTURE

9 SEE SPECIFICATIONS FOR ADDITIONAL CONSTRAINTS ON THE INSTALLATION OF THE LIGHTING SYSTEM.

NOTES REFERENCED ON THE PLANS:

1 PROVIDE ONE TYPE "FA7" FIXTURE AT EACH STAIR LANDING. MOUNT FIXTURES 8'-0" ABOVE STAIR LANDING.

SEE RFI #24



EXTERIOR LIGHTING CONTROL

NO SCALE

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LIGHTING PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443/140330 **E201**

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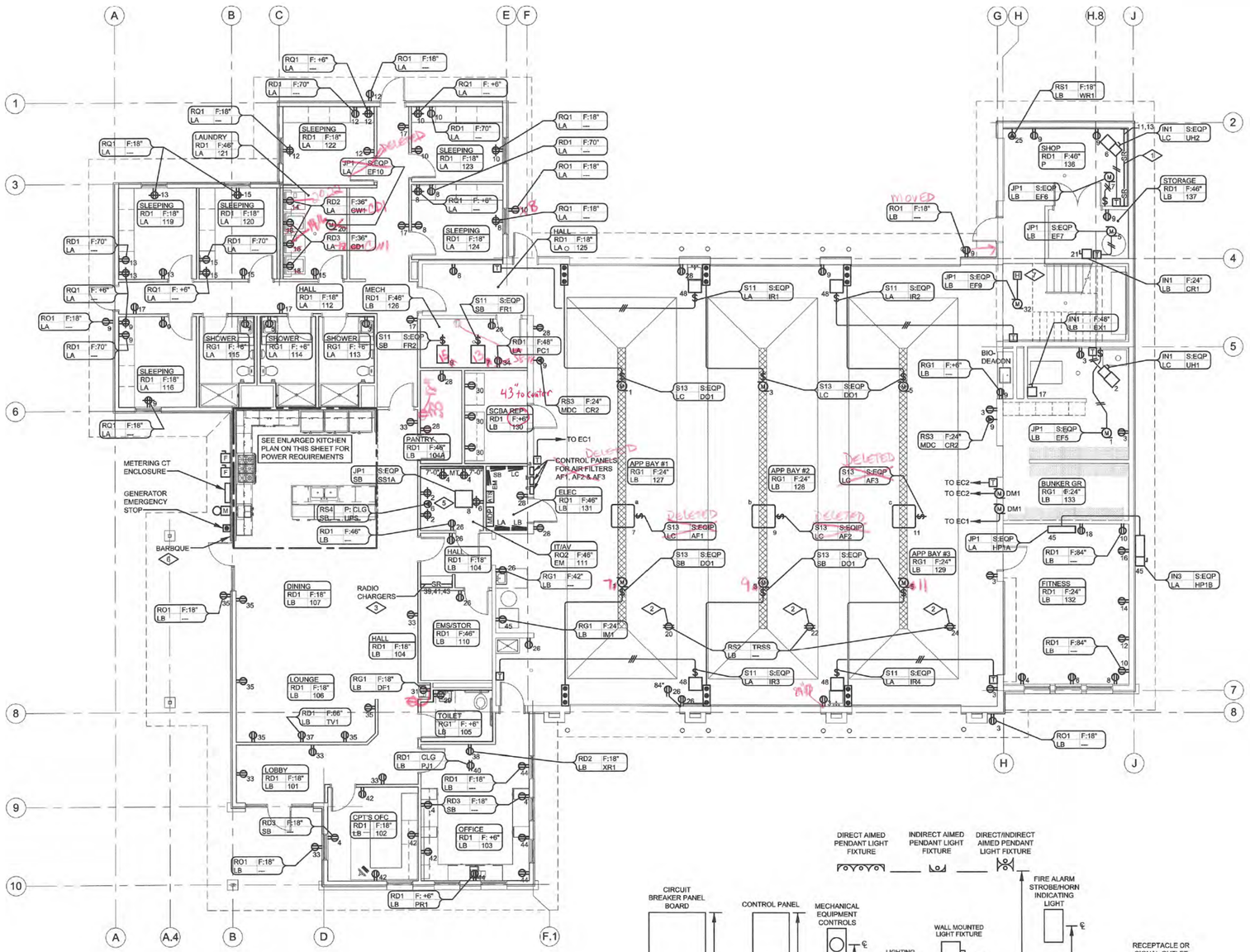
SEE ENLARGED KITCHEN PLAN ON THIS SHEET FOR POWER REQUIREMENTS
METERING CT ENCLOSURE
GENERATOR EMERGENCY STOP
BARBQUE
SLEEPING RD1 F:18" LA 119
SLEEPING RD1 F:18" LA 120
LAUNDRY RD1 F:48" LA 121
SLEEPING RD1 F:18" LA 122
SLEEPING RD1 F:18" LA 123
SLEEPING RD1 F:18" LA 124
HALL RD1 F:18" LA 125
MECH RD1 F:46" LB 126
HALL RD1 F:18" LA 112
SLEEPING RD1 F:18" LA 116
SHOWER RG1 F: +6" LA 115
SHOWER RG1 F: +6" LA 114
SHOWER RG1 F: +6" LA 113
PANTRY RD1 F:46" LB 104A
SCBA REPR RD1 F:46" LB 130
ELEC RD1 F:46" LB 131
HALL RD1 F:18" LB 104
DINING RD1 F:18" LB 107
LOUNGE RD1 F:18" LB 106
LOBBY RD1 F:18" LB 101
TOILET RG1 F: +6" LB 105
CPT'S OFC RD1 F:18" LB 102
OFFICE RD1 F: +6" LB 103
EMS/STOR RD1 F:46" LB 110
SHOP RD1 F:46" P 136
STORAGE RD1 F:46" LB 137
BIO-DECON
BUNKER GR RG1 F:24" LB 133
FITNESS RD1 F:24" LB 132
APP BAY #1 RG1 F:24" LB 127
APP BAY #2 RG1 F:24" LB 128
APP BAY #3 RG1 F:24" LB 129
RADIO CHARGERS
CONTROL PANELS FOR AIR FILTERS AF1, AF2 & AF3
DELETED
MOVED
43" to center
TO EC1
TO EC2
DM1
RS4 P: CLG SB UPS
RS3 F:24" MDC CR2
RS2 TRSS LB —
RS1 F:18" LB WR1
JP1 S:EOP SB SS1A
JP1 S:EOP LA EF10
JP1 S:EOP LB EF6
JP1 S:EOP LB EF7
JP1 S:EOP LB EF9
JP1 S:EOP LB EF5
JP1 S:EOP LA HP1A
JP1 F:60" LA HD1
JP1 F: +6" LA CM1
IN1 S:EOP LC UH2
IN1 F:24" LB CR1
IN1 S:EOP LC UH1
IN1 F:48" LB EX1
IN3 S:EOP LA HP1B
S11 S:EOP SB FR1
S11 S:EOP SB FR2
S11 S:EOP LA IR1
S11 S:EOP LA IR2
S11 S:EOP LA IR3
S11 S:EOP LA IR4
S13 S:EOP LC DO1
S13 S:EOP LC AF1
S13 S:EOP LC AF2
S13 S:EOP LC AF3
S13 S:EOP SB DO1
RD1 F:70" LA —
RD1 F:84" LB —
RD2 F:36" OW1
RD3 F:36" OD1
RD1 F:48" LB PC1
RD1 CLG LB PJ1
RD2 F:18" LB XR1
RD3 F:18" SB —
RG1 F:42" LB —
RG1 F:24" LB IM1
RG1 F:18" LB DF1
RG1 F:6" LB —
RO1 F:18" LB —
RO1 F: +6" LA —
RO1 F:18" LA —
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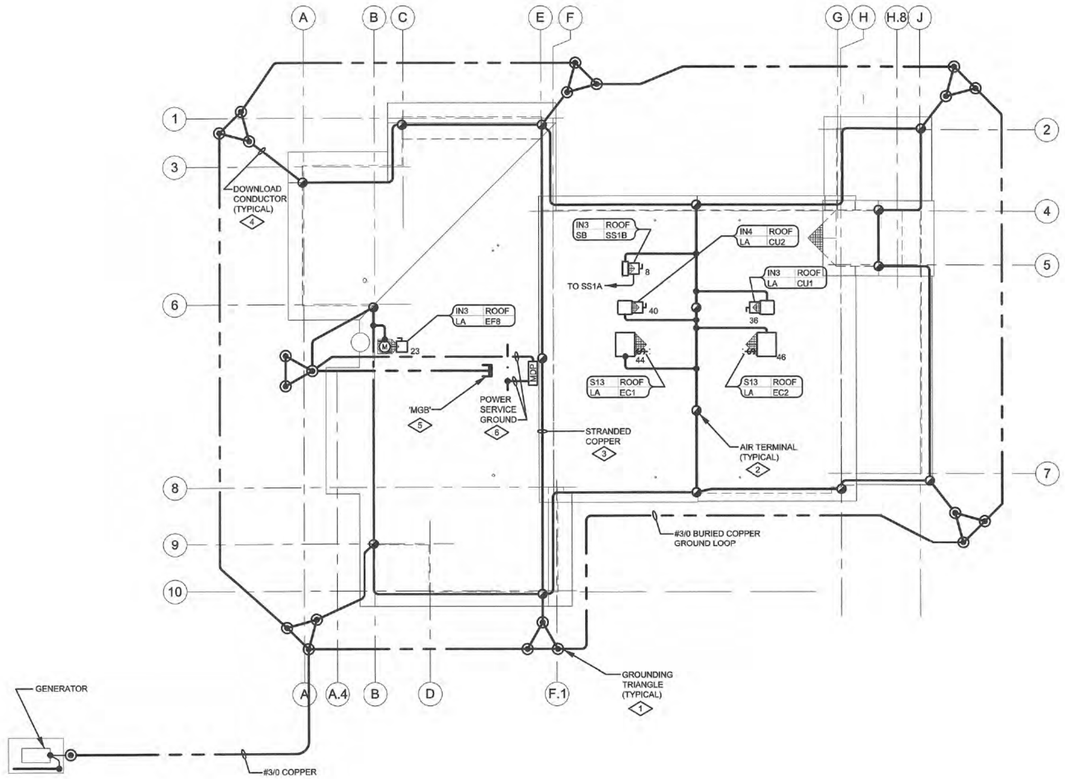
RD1 F:18" LB —
RD1 F:18



LIGHTNING PROTECTION / ROOF PLAN

SCALE: 1/16" = 1'-0"

0 4 8 16 32 40

NORTH

SITE LIGHTING SCHEDULE

LIGHTING FIXTURE			LAMP		BALLAST / DRIVER TYPE 1		BALLAST / DRIVER TYPE 2		
DESIGNATION DESCRIPTION DIMENSIONS	MANUFACTURER CATALOG # FIRST HALF CATALOG # SECOND HALF APPROVED ALTERNATES HOUSING MATERIAL	MOUNTING AIMING DIFFUSER REFLECTOR HOUSING FINISH	QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		DESCRIPTION
			LUMENS	COLOR TEMPERATURE	STARTING METHOD	BALLAST FACTOR	STARTING METHOD	BALLAST FACTOR	
			C. R. I.	LAMP LIFE	MIN START TEMP	HARMONICS	START TEMP	HARMONICS	
LF1 L.E.D: FLOOD LIGHT 3.14" H X 8.8" W X 24.8" L	HUBBELL AFL-12LU-5K-BZ — LITHONIA, METALUX CAST ALUMINUM	GROUND ADJUSTABLE TEMPERED GLASS — DARK BRONZE	1 - 22 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED — —		LF1: L.E.D: FLOOD LIGHT 120 V 22 W ENVIRONMENT: -20F TO 120 DEG F & WET.
			1000 L	5100 DEG K	INSTANT	>=1.00	—	—	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	—	—	
ME2 METAL HALIDE: CUT-OFF 22" H X 25" W X 25" L X 25" DIA	KIM 1A RA252 250PMH BL HA12 L-TM1 CAL16-641188 BL-P ANTIQUE ST LIGHT, AAL ALUMINUM	16' POLE CUT-OFF — HYDORFORMED BLACK	1 - 250 W CLEAR PULSE START G.E. MXR/250/U/MED		1 - H.I.D.: CORE & COIL PULSE START SELECTED BY FIXTURE MANUFACTURER —		SECOND BALLAST / DRIVER TYPE NOT REQUIRED — —		ME2: METAL HALIDE: CUT-OFF 208 V 290W W ENVIRONMENT: -20F TO 120 DEG F & WET. PROVIDE STEPPED ALUMINUM 16' POLE AND BRACHET ARM. PROVIDE TYPE II DISTRIBUTION.
			13300 L	3900 DEG K	PULSE	>=80	—	—	
			>=60	>=12,000 HOURS	-20 DEG F	<=20%	—	—	
ME3 METAL HALIDE: CUT OFF 22" H X 25" W X 25" L X 25" DIA	KIM 1A RA254 250PMH BL HA12 L-TM1 CAL16-641186 BL-P ANTIQUE ST LIGHT, AAL ALUMINUM	16' POLE CUT-OFF — HYDORFORMED BLACK	1 - 250 W CLEAR PULSE START G.E. MXR/250/U/MED		1 - H.I.D.: CORE & COIL PULSE START SELECTED BY FIXTURE MANUFACTURER —		SECOND BALLAST / DRIVER TYPE NOT REQUIRED — —		ME3: METAL HALIDE: CUT OFF 208 V 290W W ENVIRONMENT: -20F TO 120 DEG F & WET. PROVIDE 16' STEPPED ALUMINUM 16' POLE AND BRACHET ARM. PROVIDE TYPE IV DISTRIBUTION.
			13300 L	3900 DEG K	PULSE	>=80	—	—	
			>=60	>=12,000 HOURS	-20 DEG F	<=20%	—	—	
ME4 METAL HALIDE: CUT OFF 16.5" H X 17" W X 17" L X 17" DIA	KIM 1A RA172 150PMH BL HA12 S-TM1 CAS16-534188 BL-P ANTIQUE ST LIGHT, AAL ALUMINUM	16' POLE CUT-OFF — HYDORFORMED BLACK	1 - 150 W CLEAR PULSE START G.E. MXR/150/U/MED		1 - H.I.D.: CORE & COIL PULSE START SELECTED BY FIXTURE MANUFACTURER —		SECOND BALLAST / DRIVER TYPE NOT REQUIRED — —		ME4: METAL HALIDE: CUT OFF 208 V 185W W ENVIRONMENT: -20F TO 120 DEG F & WET. PROVIDE 6' STEPPED ALUMINUM 16' POLE AND BRACHET ARM. PROVIDE TYPE II DISTRIBUTION.
			13300 L	3400 DEG K	PULSE	>=80	—	—	
			>=65	>=15,000 HOURS	-20 DEG F	<=20%	—	—	
MG1 METAL HALIDE: FLOODLIGHT 20" H X 12" W X 12" L	HYDREL M9720 SS 150M *** SP FLC 12S GARDCO, SPALDING CAST ALUMINUM	GROUND ADJUSTABLE CLEAR HYDORFORMED NATURAL ALUMINUM	1 - 150W CLEAR PULSE START G.E. MXR/150./U/MED		1 - H.I.D.: ELECTRONIC PULSE START ADVANCE IZTEMH70EPS-F		SECOND BALLAST / DRIVER TYPE NOT REQUIRED — —		MG1: METAL HALIDE: FLOODLIGHT 120 V 210 W ENVIRONMENT: -20F TO 120 DEG F & WET. IN GRADE ADJUSTABLE FLOOD LIGHT.
			13300 L	3200 DEG K	PULSE	>=1.00	—	—	
			>=70	>=12,000 HOURS	-20 DEG F	<=20%	—	—	

LIGHTNING PROTECTION NOTES:

1. PROVIDE LIGHTNING PROTECTION AND GROUNDING PER NFPA 780, AND IN ACCORDANCE WITH THESE SPECIFICATIONS AND PER MOTOROLA R56- STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES. WORK SHALL BE SUBCONTRACTED TO A NATIONAL LIGHTNING PROTECTION DESIGN BUILD VENDOR.
2. GROUND RODS TO BE DRIVEN BY HAND SLEDGING, SLIDE HAMMER, OR POWER DRIVER TO THE RING WIRE DEPTH, UTILIZING A GROUND ROD DRIVND SHIELD TO PREVENT MUSHROOMINS OF THE TOPS OF THE RODS.
3. WHERE GROUND RODS CANNOT BE DRIVEN VERTICALLY, DRIVE PARALLEL TO OR AWAY FROM EXTERIOR WALL. ANGLE SHALL NOT EXCEED 45°.
4. GROUND RODS ARE TO BE DRIVEN IN UNDISTURBED OR THROUGHLY COMPACTED FILL AREAS.
5. DO NOT DRIVE OR LAY RODS IN GRAVEL BEDS WHICH ARE USED FOR DRAINAGE, UNLESS THE RODS EXTEND THROUGH SUCH BEDS FAR ENOUGH TO PROVIDE AT LEAST 8'-0" OF CONTACT WITH THE UNDISTURBED EARTH UNDERNEATH.
6. BEFORE BACK FILLING THE GROUNDING ELECTRODE SYSTEM, AN ELECTRICAL CONTINUITY CHECK SHALL BE MADE AT THIS TIME TO ENSURE THAT ALL CONNECTIONS ARE INTACT. A WRITTEN RECORD OF THIS CHECK, WITH PHOTOS, SHALL BE PLACED IN THE OFFICE RECORDS FOR FUTURE REFERENCE.
7. AFTER BACK FILLING AND COMPACTING, AN EARTH RESISTIVITY MEASUREMENT SHALL BE MADE ON THE EXTERIOR GROUND RING SYSTEM PRIOR TO CONNECTION TO THE BUILDING GROUND SYSTEM. THE READING SHALL BE 5 OHMS OR LESS AND BE INCLUDED IN THE OFFICE RECORDS FOR FUTURE REFERENCE.
8. ALL GROUNDING CABLE IN CONCRETE OR THROUGH WALLS SHALL BE IN 1" PVC CONDUIT. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTOR SLEEVES.
9. ALL REINFORCING STEEL AND ALL OTHER EMBEDDED METALLIC ITEMS SHALL BE GROUNDED PER THE NEC AND ALL LOCAL ELECTRICAL CODES.
10. WHERE MECHANICAL CONNECTORS (TWO HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO OXIDE A" BY DEARBORN CHEMICAL COMPANY ON ALL CONNECTORS. PROVIDE LOCK WASHERS ON ALL MECHANICAL CONNECTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH EXISTING AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE TYPES OF METALS BEING ATTACHED TO.
11. FRUNISH AND INSTALL ALL MATERIALS AND LABOR REQUIRED TO PROVIDE A COMPLETE FUNCTIONAL LIGHTNING PROTECTION AND COMMON GROUND SYSTEM FOR THE BUILDING AS SHOWN AND DETAILED ON THE PLANS.
12. ALL MATERIALS FOR THIS SYSTEM SHALL BE NEW AND THE STANDARD PRODUCT OF A MANUFACTURER REGULARLY ENGAGED IN THE PRODUCTION OF LIGHTNING PROTECTION SYSTEMS AND SHALL BE OF THE LATEST APPROVED DESIGNS. EQUIPMENT SHALL BE UL LISTED.
13. SYSTEM MATERIALS IN GERNERAL SHALL BE COPPER AND HIGH COPPER-CONTENT BRONZE CASTINGS, AND SHALL COMPLY IN WEIGHT, SIZE, AND COMPOSITION FOR THE CLASS OF STRUCTURE TO BE PROTECTED. THE SYSTEM SHALL CONSIST OF ALL NECESSARY CABLES, AIR TERMINALS, MOUNTING BASES, FITTINGS, COUPLINGS, CONNECTORS, FASTENERS, ETC., AS REQUIRED TO GIVE A COMPLETE AND COORDINATED SYSTEM. ALL CABLE AND ALL AIR TERMINALS SHALL BEAR PROPER UL LABELS.
14. ALL SYSTEM FITTINGS EXCEPT CABLE HOLDERS, REGARDLESS OF STRUCTURE CLASSIFICATION SHALL BE HEAVE-DUTY TYPE MADE FROM BRONZE CASTINGS AND SECURED WITH BOLTED-PRESSURE CLAMPS. PRESSURE PLATES MADE FROM STAMPED OR PRESSED METAL PARTS, OR FITTINGS UTILIZING CRIMP-TYPE PRESSURE DEVICES WILL NOT BE ALLOWED. ALL BOLTS, SCREWS AND RELATED TYPE HARDWARE SHALL BE 300 SERIES STAINLESS STEEL. ALL CABLE TO CABLE, CABLE TO LUG, CABLE TO GROUND ROD, AND CABLE TO STRUCTURAL STEEL CONNECTIONS SHALL BE EXOTHERMICALLY WELDED OR ACCEPTED EQUIVALENT. CONTRACTOR SHALL NOTIFY ENGINEER WHERE CONNECTIONS CANNOT BE USED.
15. A COMMON GROUND SHALL BE PROVIDED BETWEEN THE LIGHTNING PROTECTION SYSTEM AND THE BUILDING ELECTRIC AND TELEPHONE SERVICE GROUNDS. IN ADDITION, ALL UNDERGROUND METALLIC PIPING SYSTEMS SHALL BE BONDED WITH FULL SIZE CONDUCTOR; INCLUDING WATER, GAS, SEWER, AND ANY OTHER PIPING SYSTEM, AT POINTS WHERE THESE PIPINGS ENTER THE BUILDING. BONDING OF UTILITY PIPING SYSTEMS IS SUBJECT TO THEIR COOPERATION AND APPROVAL.
16. BONDING OF ALL METALLIC OBJECTS AND SYSTEMS AT ROOF LEVELS AND ELSEWHERE ON THE STRUCTURE SHALL BE COMPLETE. PRIMARY BONDS FOR METAL BODIES OF CONDUCTANCE SHALL BE BONDED WITH APPROPRIATE FITTINGS AND FULL-SIZE CONDUCTOR; AND SHALL CONSIST OF, BUT NOT BE LIMITED TO, THE FOLLOWING: ROOF EXHAUST FAN, ETC. EXTERIOR ARCHITECTURAL METAL ASCIA AND/OR CURTAIN WALLS OR MULLIONS, WHICH EXTEND THE FULL HEIGHT OF THE STURCTURE SHALL ALSO BE BONDED, IF NOT INHERENTLY BONDED THROUGH THE BUILDING FRAME.

NOTES REFERENCED ON THE PLANS:

1. PROVIDE 5/8" X 10'-0" COPPER CLAD GROUND RODS AT LOCATIONS SHOWN. INSTALL GROUND RODS IN A TRIANGULAR CONFIGURATION 8'-0" ON A SIDE.
2. PROVIDE AIR TERMINAL ON ROOF AS INDICATED. AIR TERMINALS SHALL BE SOLID, 5/8" DIAMETER ROUND COPPER BAR, FULL NICKEL PLATED, AND OF SUFFICIENT LENGTH TO PROJECT 10" MINIMUM ABOVE THE OBJECT TO BE PROTECTED, AND UL LABELED. SPACING SHALL NOT EXCEED 20'-0" BETWEEN TERMINALS ALONG PEAKS. PROVIDE MASTIC COMPATIBLE WITH ROOF AND ALL NECESSARY HARDWARE TO SECURELY MOUNT AIR TERMINALS IN A PERMANENT AND RIGID MANNER. COORDINATE WITH ROOF INSTALLER FOR PROVIDING AN ADDITIONAL 12" X 12" PIECE OF ROOF MEMBRANE AT EACH TERMINAL LOCATION. DO NOT PENETRATE ROOF MEMBRANE.
3. PROVIDE IPCR32S STRANDED COPPER , OR APPROVED EQUIVALENT, SIZED BY THE LIGHTNING PROTECTION DESIGN VENDOR FOR INTERCONNECTING CONDUCTORS. ROUTE ALONG ROOF BETWEEN TERMINALS AS INDICATED. SECURE CONDUCTORS TO ROOF WITH APPROVED FASTENERS, SPACED 3'-0" MAXIMUM. COORDINATE WITH ROOF INSTALLER FOR PROVIDING AN ADDITIONAL 6" X 6" PIECE FO MEMBRANE AT EACH ROOF ATTACHMENT LOCATION, DO NOT PENETRATE ROOF MEMBRANE. TYPICAL FOR ALL INTERCONNECTING CONDUCTORS.
4. PROVIDE DOWNLEAD CONDUCTOR TO CONNECT LIGHTNING PROTECTION SYSTEM TO GROUND LOOP. CONCEAL CONDUCTOR IN STRUCTURE, ROUTE CONDUCTOR DOWN CORNERS OF BUILDING IN LOCATIONS SHOWN. COORDINATE DETAILS WITH ARCHITECTURAL AND STRUCTURAL ENGINEER. PROVIDE EXOTHERMIC WELD AT CONNECTION TO BURIED GROUNG ROD.
5. PROVIDE COPPER MASTER GROUND BAR (MGB) IN IT ROOM ON WEST WALL. 'MGB' SHALL BE 2" TALL X 1/4" THICK X 2'-0" LONG COPPER MOUNTED TO THE WALL ON STAND OFFS 24" ABOVE THE FLOOR.
6. BOND POWER SERVICE TO GROUND LOOP USING #2/0 COPPER CONDUCTOR. BOND POWER SERVICE TO REINFORCING STEEL IN FOUNDATION USING #2/0 COPPER CONDUCTOR.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

LIGHTNING PROTECTION / ROOF PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443/140330 **E302**

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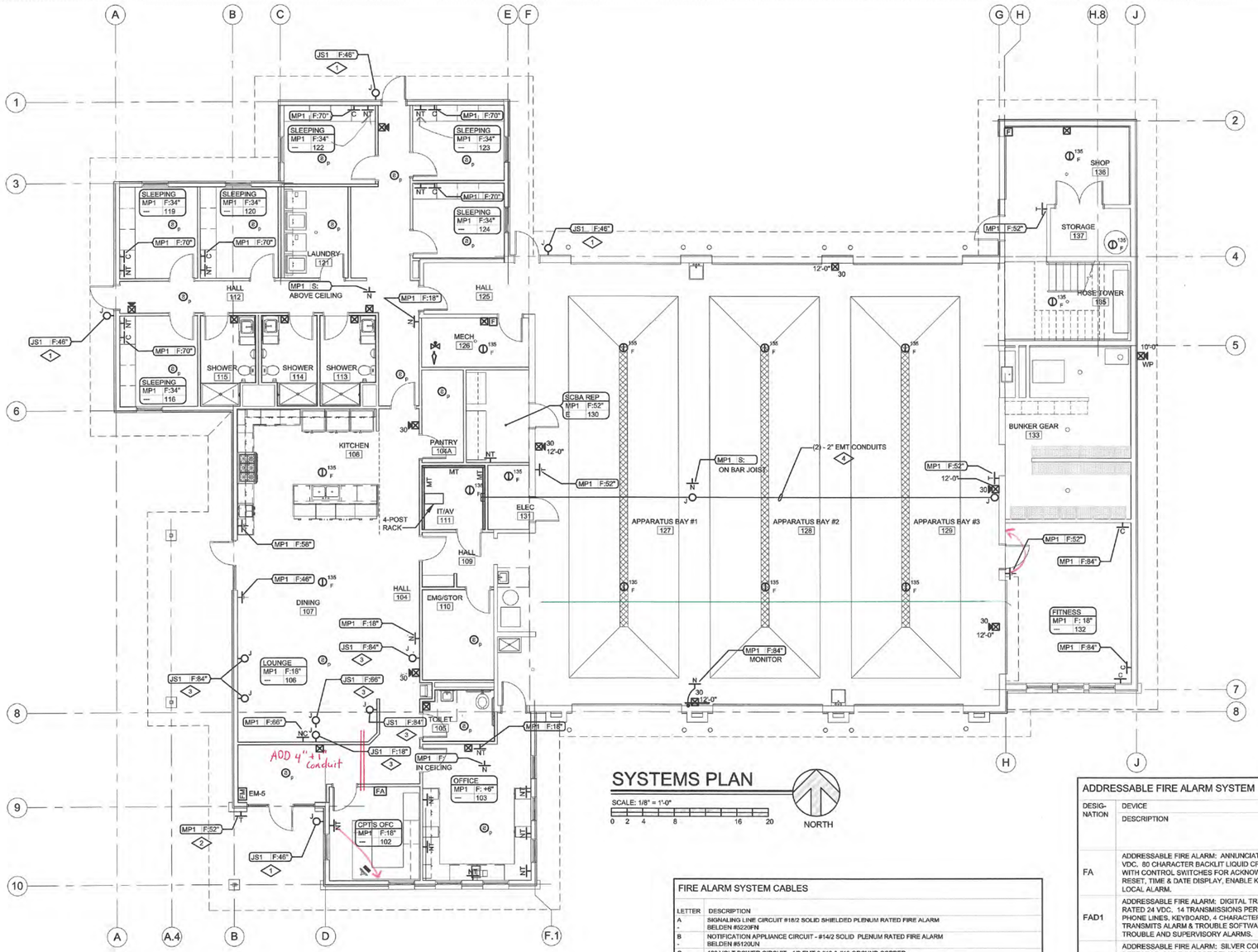


SYSTEMS PLAN

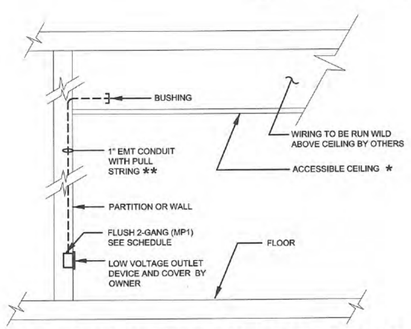
SCALE: 1/8" = 1'-0"

0 2 4 8 16 20

NORTH

SIGNAL OUTLET RACEWAY OPTIONS

NO SCALE

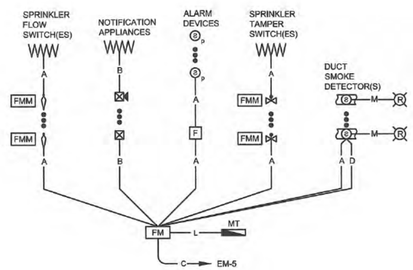


* IN CASES WHERE CEILING IS NOT ACCESSIBLE, EXTEND CONDUITS TO THE SPACE ABOVE THE NEAREST ACCESSIBLE CEILING.

** PROVIDE 1-1/4" CONDUIT WHERE PLANS SHOW 4 OR MORE JACKS.

FIRE ALARM SYSTEM RISER

NO SCALE



FIRE ALARM SYSTEM CABLES

LETTER	DESCRIPTION
A -	SIGNALING LINE CIRCUIT #18/2 SOLID SHIELDED PLENUM RATED FIRE ALARM BELDEN #5223FN
B -	NOTIFICATION APPLIANCE CIRCUIT - #14/2 SOLID PLENUM RATED FIRE ALARM BELDEN #5120UN
C -	120 VOLT POWER CIRCUIT - 1/2 EMT 2 #12 & #12 GROUND COPPER SOUTHWIRE BUILDING WIRE
D -	24 VOLT POWER CABLE - #16/2 SOLID PLENUM RATED FIRE ALARM BELDEN #5220UN
H -	ANNUNCIATOR CABLE - 2 #16/2 SOLID SHIELDED AND 1 #16/2 SOLID UNSHIELDED PLENUM RATED FIRE ALARM TWO BELDEN #5220FN & ONE BELDEN #5220UN
L -	DIALER CIRCUIT - 4 PAIR CATEGORY 5 CABLE BELDEN #1624P
M -	REMOTE TEST CIRCUIT - 18/4 SOLID PLENUM RATED FIRE ALARM BELDEN #5320UN

FIRE ALARM SYSTEM SEQUENCE OF OPERATION

SYSTEM ACTIONS	SMOKE DETECTOR	HEAT DETECTOR	DUCT SMOKE DETECTOR	PULL STATION	SPRINKLER FLOW SWITCH	SPRINKLER TAMPER SWITCH
ACTIVATES SYSTEM NOTIFICATION APPLIANCES	●	●		●	●	
ACTIVATES SYSTEM SUPERVISORY ALARM						●
DISPLAYS AT MAIN FIRE ALARM PANEL	●	●		●	●	●
RELEASES MAGNETICALLY HELD DOORS	●	●		●		
SHUTS DOWN ASSOCIATED AIR HANDLING UNIT			●			
CLOSES FIRE/SMOKE DAMPER	●		●	●		
ACTIVATES DIALER GENERAL ALARM SIGNAL	●	●		●		
ACTIVATES DIALER FLOW ALARM SIGNAL					●	
ACTIVATES DIALER SUPERVISORY SIGNAL						●
ACTIVATES EXTERIOR HORN/STROBE ABOVE FIRE DEPARTMENT CONNECTION	●	●			●	

GENERAL SYSTEMS NOTES:

1 LOW VOLTAGE SIGNAL WIRING MAY BE RUN OPEN ABOVE ACCESSIBLE SUSPENDED CEILINGS. ALL WIRING RUN OPEN IN ACCESSIBLE CEILING SPACES USED FOR AIR RETURN SHALL BE PLENUM RATED.

2 WIRING INSTALLED IN WALLS AND ABOVE INACCESSIBLE CEILINGS SHALL BE RUN IN CONDUIT.

3 REVIEW CASEWORK ELEVATIONS ON ARCHITECTURAL DRAWINGS AND CASEWORK SHOP DRAWINGS PRIOR TO INSTALLATION OF WIRING DEVICES. CALL ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER. WHERE DEVICES WOULD FALL BEHIND CASEWORK, RELOCATE DEVICES 2" CLEAR OF BACKSPLASH, OR COUNTER.

4 DEVICE MOUNTING HEIGHTS SHOWN ON THE PLANS TAKE PRECEDENCE OVER DEFAULT MOUNTING HEIGHTS SHOWN IN THE LEGEND.

5 ALL WIRING DEVICES ARE TO BE INSTALLED FLUSH UNLESS OTHERWISE INDICATED.

6 THE MOUNTING HEIGHT OF SIGNAL WIRING DEVICES IS DEFINED AS THE DISTANCE FROM THE FINISHED FLOOR TO THE CENTER OF THE DEVICE BOX.

7 PROVIDE FAR SIDE BOX SUPPORTS ON ALL BOXES MOUNTED TO STEEL STUDS. THE DEPTH OF THE MUD RINGS SHALL BE NO LESS THAN THE THICKNESS OF THE SHEETROCK.

8 THE FOLLOWING MAIN KEY DEFINES SIGNAL WIRING DEVICES IN THE ROOM LISTED. ALL DEVICES IN THIS SPACE ARE TO COMPLY WITH THIS MAIN KEY UNLESS OVERRIDDEN BY A DEVICE TAG.

ROOM NAME — OFFICE
SCHEDULED SIGNAL DEVICE — JS1 F:18" — 1000
SIGNAL DEVICE MOUNTING SURFACE OF FLUSH: HEIGHT (MH OF +6" IS HEIGHT ABOVE COUNTER)
ROOM NUMBER

9 THE FOLLOWING DEVICE TAG DEFINE SIGNAL WIRING DEVICES WHICH ARE DIFFERENT FROM THOSE DEFINED IN THE MAIN KEY. THESE DEVICE TAGS OVERRIDE THE MAIN KEY ONLY FOR THE DEVICE OR DEVICES INDICATED.

SCHEDULED SIGNAL DEVICE — JS1 F:18"
SIGNAL DEVICE MOUNTING SURFACE OF FLUSH: HEIGHT (MH OF +6" IS HEIGHT ABOVE COUNTER)

10 SEE SPECIFICATIONS FOR ADDITIONAL CONSTRAINTS ON THE INSTALLATION OF SIGNAL WIRING DEVICE AND BOXES.

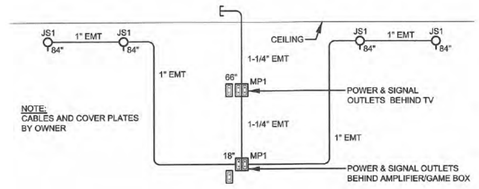
NOTES REFERENCED ON THE PLANS:

1 ROUGH-IN FOR DOOR ACCESS CONTROL CARD READER.

2 PROVIDE FLUSH SIGNAL BOX AND 1" EMT TO SPACE ABOVE THE LOBBY CEILING FOR OWNER'S TELEPHONE INTERCOM.

3 PROVIDE JUNCTION BOX AND EMPTY 1" CONDUIT WITH PULL STRINGS BETWEEN ALL JUNCTION BOXES FOR FUTURE SURROUND SOUND SYSTEM.

4 PROVIDE TWO 2" EMT CONDUITS FROM THE IT ROOM TO TWO 6"X12"X12" PULL BOXES ON THE UNDER SIDE OF THE ROOF TRUSSES IN BUNKER GEAR #133 FOR NETWORK, TELEPHONE AND ALARMING CABLES.



NOTE: CABLES AND COVER PLATES BY OWNER

TV/SURROUND SOUND-LOUNGE 106

NO SCALE

ADDRESSABLE FIRE ALARM SYSTEM

DESIG-NATION	DEVICE DESCRIPTION	DEVICE MANUFACTURER CATALOG NUMBER ALTERNATE MANUFACTURERS	BOX DESCRIPTION	COVER DESCRIPTION
FA	ADDRESSABLE FIRE ALARM: ANNUNCIATOR, RATED 24 VDC. 80 CHARACTER BACKLIT LIQUID CRYSTOL DISPLAY WITH CONTROL SWITCHES FOR ACKNOWLEDGE, SILENCE AND RESET, TIME & DATE DISPLAY, ENABLE KEY SWITCH & LOCAL ALARM.	NOTIFIER LCD-80 --- --- ---	9.9"H X 4.6"W X 2.5"D NOTIFIER #ABF-1B, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. ---	NONE REQUIRED --- --- --- ---
FAD1	ADDRESSABLE FIRE ALARM: DIGITAL TRANSMITTER, RATED 24 VDC. 14 TRANSMISSIONS PER HOUR, DUAL PHONE LINES. KEYBOARD. 4 CHARACTER LED DISPLAY. TRANSMITS ALARM & TROUBLE SOFTWARE ZONES, SYSTEM TROUBLE AND SUPERVISORY ALARMS.	NOTIFIER 411UDACT --- --- ---	9.9"H X 4.6"W X 2.5"D NOTIFIER #ABF-6R, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. ---	NONE REQUIRED --- --- --- ---
FADU	ADDRESSABLE FIRE ALARM: SILVER COLOR, DUCT SMOKE DETECTOR, BUILT-IN DPDT RELAY, SAMPLE TUBE, PHOTOELECTRIC TYPE, RATED 24 VDC. PROVIDE SEPARATE REMOTE ALARM INDICATOR WITH TEST SWITCH.	NOTIFIER FSC-751RP & RTS-451 --- --- ---	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---
FAH1	ADDRESSABLE FIRE ALARM: HORN/STROBE, RATED 24 VDC. CANDELA OUTPUT FIELD SELECTABLE AMONG 15, 15/75, 30, 75, AND 110, FIELD SELECTABLE HORN TONES, SYNCHRONIZABLE, AND RED COLOR.	NOTIFIER P1224MC --- --- ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
F	ADDRESSABLE FIRE ALARM: PULL STATION, RATED 24 VDC. DUAL ACTION WITH BI-COLOR ALARM STATUS LED. KEY RESET, AND BRAILLE TEXT ON HANDLE. ---	NOTIFIER NBG-12LX --- --- ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
FMM	ADDRESSABLE FIRE ALARM: MONITOR MODULE, RATED 24 VDC. MONITORS SPRINKLER FLOW AND TAMPER SWITCHES, GENERATING AN ALARM AT THE SET ADDRESS ON DEVICE CONTACT CLOSURE. 159 ADDRESSES AVAILABLE.	NOTIFIER FMM-101 --- --- ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
FM	ADDRESSABLE FIRE ALARM: MAIN PANEL, BATTERY BACKED, RATED 3A @ 120V. CAPABLE OF 301 TOTAL I/O POINTS, 99 INTELLIGENT DETECTORS, 99 ADDRESSABLE MODULES, 99 PROGRAMMABLE SOFTWARE ZONES AND 4 NAC CIRCUITS.	NOTIFIER AFP-200 --- --- ---	16"H X 14.5"W X 5.5"D, STEEL, WITH KNOCKOUTS. WALL SURFACE MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
FAS1	ADDRESSABLE FIRE ALARM: RED COLOR, STROBE, RATED 24 VDC. CANDELA OUTPUT FIELD SELECTABLE AMONG 15, 15/75, 30, 75, AND 110, FIELD SELECTABLE. ---	NOTIFIER S1224MC --- --- ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
FASP	ADDRESSABLE FIRE ALARM: SMOKE DETECTOR, RATED 24 VDC. LASER DEVICE, WITH 2 LED ALARM STATE INDICATORS, BUILT-IN MAGNETIC TEST SWITCH, HIGH SENSAITIVITY.	NOTIFIER LPX751L + P710P BASE --- --- ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
FAT1	ADDRESSABLE FIRE ALARM: RED COLOR, HEAT DETECTOR, RATED 24 VDC. 135 DEGREE F FIXED TEMPERATURE/RATE OF RISE. ---	NOTIFIER FST-851R B710LPBP BASE ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---
FAT2	ADDRESSABLE FIRE ALARM: RED COLOR, HEAT DETECTOR, RATED 24 VDC. 200 DEGREE F FIXED TEMPERATURE/RATE OF RISE. ---	NOTIFIER FST-851H B710LPBP BASE ---	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. --- --- ---	NONE REQUIRED --- --- --- ---

NOTES:
DEVICES BY MANUFACTURERS WHICH ARE NOT LISTED IN THE SCHEDULE REQUIRE 5-DAY WRITTEN PRIOR APPROVAL.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SYSTEMS PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443/140330 **E401**

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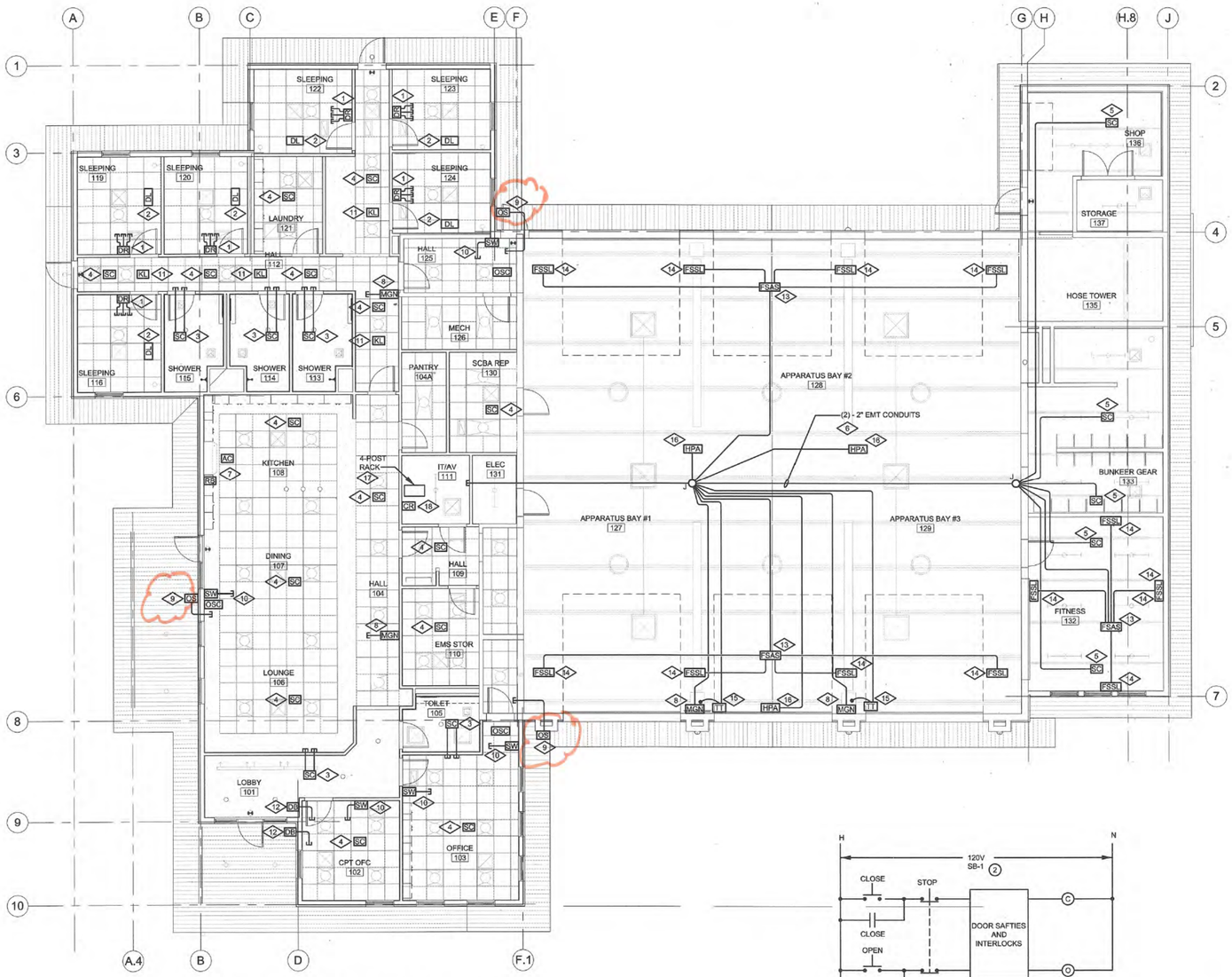
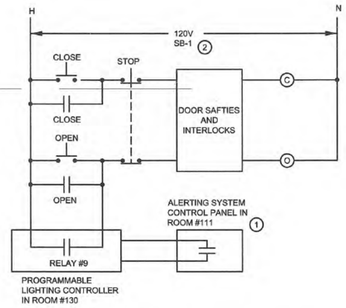


ALERTING SYSTEM PLAN

SCALE: 1/8" = 1'-0"

0 2 4 8 16 20

NORTH



BAY DOOR OPERATOR - WIRING DIAGRAM (DO-1)

NO SCALE

(1) DOOR OPERATORS IN FRONT OF APPARATUS BAYS ARE TO BE OPENED BY THE ALERTING SYSTEM WHEN A CALL COMES IN. REAR DOORS ARE NOT TO BE OPENED BY THE ALERTING SYSTEM.

(2) REMAINING DOORS TO BE WIRED THROUGH SB-3/RELAY #9 AND SB-5/RELAY #10.

NOTES REFERENCED ON THE PLANS:

(1) DORM REMOTE (DR):
RECEIVE HOFFMAN BOX - PART 43050 CAT #A-SE10X8X4 FROM WESTNET. MOUNT CENTER LINE OF BOX AT 48" AFF. CENTER BOX ON HEADBOARD OF BED. RECESS IN WALL 1/4" BELOW SHEETROCK. PROVIDE 3 - 3/4" EMT CONDUITS TO THE SPACE ABOVE THE ACCESSIBLE CEILING WITH BUSHINGS AND PULL STRINGS. WIRING SHALL BE DONE BY WESTNET.

(2) DORM LIGHT (DL):
NO WORK BY ELECTRICAL SUB. LIGHT IS LINE POWERED THROUGH CAT 5 CABLE. WIRING BY WESTNET.

(3) SATELLITE CONTROLLER (SC):
RECEIVE HOFFMAN BOX - PART 43050 CAT #A-SE10X8X4 FROM WESTNET. RECESS IN CEILING 1/4" ABOVE SHEETROCK. PROVIDE 2 - 3/4" EMT CONDUITS TO THE SPACE ABOVE THE ACCESSIBLE CEILING WITH BUSHINGS AND PULL STRINGS. WIRING SHALL BE DONE BY WESTNET.

(4) SATELLITE CONTROLLER (SC):
BOX AND RACEWAYS NOT REQUIRED FOR ACCESSIBLE CEILING INSTALLATION. WIRING SHALL BE DONE BY WESTNET.

(5) SATELLITE CONTROLLER (SC):
RECEIVE HOFFMAN BOX - PART 43050 CAT #A-SE10X8X4 FROM WESTNET. MOUNT BOX ON UNDERSIDE OF TRUSS OR BAR JOIST. PROVIDE 1" EMT CONDUIT TO THE SIGNAL JUNCTION BOX AT THE CEILING OF BUNKER GEAR ROOM #133. WIRING SHALL BE DONE BY WESTNET.

(6) PROVIDE TWO 2" EMT CONDUITS FROM THE IT ROOM TO A 6" X 12" X 12" JUNCTION BOX ON THE UNDER SIDE OF THE ROOF TRUSSES IN BUNKER GEAR #133 FOR NETWORK, TELEPHONE AND ALARMING CABLES.

(7) APPLIANCE CONTROLLER (AC): RESET BUTTON (RB):
THE APPLIANCE CONTROLLER IS TO BE MOUNTED ABOVE THE CEILING. PROVIDE RECEPTACLE ABOVE THE CEILING FOR POWER. THE RESET BUTTON IS TO MOUNTED IN A SINGLE GANG DEEP BOX AT 48" AFF. PROVIDE A 1": CONDUIT TO THE SPACE ABOVE THE CEILING. SEE GAS SOLENOID WIRING DIAGRAM ON THIS SHEET. SOLENOID VALVE WIRING SHALL BE DONE BY THE ELECTRICAL SUB-CONTRTACTOR.

(8) VIDEO MESSENGER (MGN):
PROVIDE A SINGLE GANG DEEP BOX AT 24" AFF. PROVIDE A 1" CONDUIT TO THE SPACE ABOVE THE ACCESSIBLE CEILING. WIRING TO BE DONE BY WESTNET.

(9) OUTSIDE SPEAKER (OS): 12'-0 Per RFI #18
PROVIDE A SINGLE GANG DEEP BOX AT ~~10'-0"~~ AFG. PROVIDE A 3/4" CONDUIT TO THE OUTSIDE SATELLITE CONTROLLER (OSC) ABOVE THE ACCESSIBLE CEILING.

(10) SPEAKER SWITCH (SW):
PROVIDE A SINGLE GANG DEEP BOX AT 46" AFF. PROVIDE A 3/4" CONDUIT TO THE OUTSIDE SATELLITE CONTROLLER (OSC) ABOVE THE ACCESSIBLE CEILING.

(11) KNIGHT LIGHT (KL):
PROVIDE A SINGLE GANG DEEP BOX FLUSH WITH CEILING. DEVICE, TRIM AND WIRING BY WESTNET.

(12) DOOR BELL (DB) - EMERGENCY BUTTON (EB):
PROVIDE A SINGLE GANG DEEP BOX AT 46" AFF. PROVIDE A 3/4" CONDUIT TO THE SPACE ABOVE THE ACCESSIBLE CEILING. DEVICE, TRIM AND WIRING BY WESTNET.

(13) ALERTING SYSTEM STROBE (FSAS):
RECEIVE HOFFMAN BOX PART #55741, CAT #A-SE8X8X4. MOUNT ON UNDERSIDE OF TRUSS OR BAR JOIST. PROVIDE 3/4" EMT CONDUIT TO JUNCTION BOX AT CEILING OF APPARATUS BAY. WIRING TO BE DONE BY WESTNET.

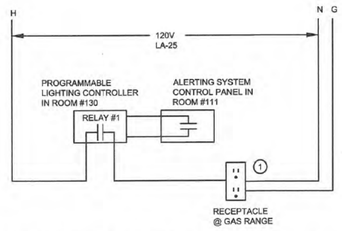
(14) FS STROBE LIGHT (FSSL):
RECEIVE CUSTOM BACK BOX FROM WESTNET. MOUNT BOX VERTICALLY IN WALL WITH TOP AT 6'-0" AFF. PROVIDE 3/4" EMT CONDUIT TO ALERTING SYSTEM STROBE (FSAS).

(15) TURN-OUT TIMER (TT):
PROVIDE A 4" SQUARE SINGLE GANG BOX MOUNTED AT 10'-0" AFF. PROVIDE 3/4" EMT CONDUIT TO JUNCTION BOX AT CEILING OF APPARATUS BAY.

(16) HIGH POWER PAGING AMPLIFIER & SPEAKER (HPA):
PROVIDE A 4" SQUARE SINGLE GANG BOX MOUNTED ON THE UNDERSIDE OF THE TRUSS OR BAR JOIST. PROVIDE A 3/4" EMT CONDUIT TO JUNCTION BOX AT CEILING OF APPARATUS BAY.

(17) 4-POST RACK:
ALERTING SYSTEM UPS (4) TO BE MOUNTED IN 4-POST EQUIPMENT RACK. ALERTING SYSTEM MASTER CONTROL UNIT TO BE MOUNTED IN 4-POST EQUIPMENT RACK.

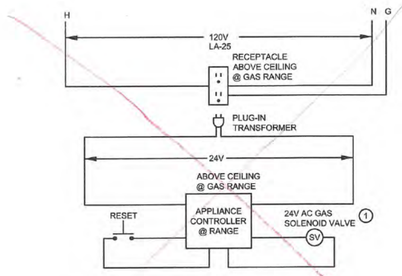
(18) CONTROL REMOTE (CR):
RECEIVE 12"X16"X6" HINGED COVER JUNCTION BOX FROM WESTNET. MOUNT ON WALL AT 48" AFF. CONTROL REMOTE CONTAINS 24V RELAYS FOR CONTROL OF ELECTRICAL DEVICES IN THE BUILDING SUCH AS THE GAS RANGE CONTROL CIRCUIT.



GAS RANGE CONTROL WIRING DIAGRAM

NO SCALE

(1) CONTROL CIRCUIT FOR GAS RANGE TO BE DE-ENERGIZED BY ALERTING SYSTEM WHEN FIREMEN ARE ON A CALL.



GAS SOLENOID VALVE WIRING DIAGRAM

NO SCALE

(1) GAS SOLENOID VALVE TO BE DE-ENERGIZED (CLOSED) BY ALERTING SYSTEM WHEN FIREMEN ARE ON A CALL.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

ALERTING SYSTEM PLAN

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO: E402

PROJECT NO: 1443/140330

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LIGHTING SCHEDULE

LIGHTING FIXTURE			LAMP		BALLAST / DRIVER TYPE 1		BALLAST / DRIVER TYPE 2		
DESIGNATION DESCRIPTION DIMENSIONS	MANUFACTURER CATALOG # FIRST HALF CATALOG # SECOND HALF APPROVED ALTERNATES HOUSING MATERIAL	MOUNTING AIMING DIFFUSER REFLECTOR HOUSING FINISH	QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		DESCRIPTION
			LUMENS	COLOR TEMPERATURE	STARTING METHOD	BALLAST FACTOR	STARTING METHOD	BALLAST FACTOR	
			C. R. I.	LAMP LIFE	MIN START TEMP	HARMONICS	START TEMP	HARMONICS	
FA1 FLUORESCENT: ARCHITECTURAL 4.75" H X 24" W X 2' L	COLUMBIA TRE 22-3 17 G RFA E U --- LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT/INDIRECT RIBBED FROSTED ACRYLIC --- PAINTED WHITE	3 - 17 WATT 24" T8 LINEAR FLUORESCENT G.E. F17T8/XL/SPX35/ECO		1 - FLUOR: 3 OR 4 LAMP 42 KHz ELECTRONIC ADVANCE REL-4P32-SC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FA1: FLUORESCENT: ARCHITECTURAL 120 V 44 W ENVIRONMENT: ABOVE 50F & DRY. TROFFER WITH ARCHITECTURAL LENS.
			1350 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FA2 FLUORESCENT: ARCHITECTURAL 4.75" H X 24" W X 2' L	COLUMBIA TRE 22-3 17 G RFA ED U --- LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT/INDIRECT RIBBED FROSTED ACRYLIC --- PAINTED WHITE	3 - 17 WATT 24" T8 LINEAR FLUORESCENT G.E. F17T8/XL/SPX35/ECO		1 - FLUOR: 3 OR 4 LAMP 42 KHz ELECTRONIC ADVANCE REL-4P32-SC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FA2: FLUORESCENT: ARCHITECTURAL 120 V 44 W ENVIRONMENT: ABOVE 50F & DRY. TROFFER WITH ARCHITECTURAL LENS AND ELECTRONIC DIMMING BALLAST.
			1350 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FA3 FLUORESCENT: ARCHITECTURAL 4" H X 3.2" W X 4' L	FOCAL POINT FAVA NS 1T5 2C 120 S F 2EG SN WH 4' PINNACLE, METALUX SHEET STEEL	CEILING RECESSED DIRECT/ACCENT PERFERATED METAL --- PAINTED WHITE	1 - 21 WATT 33" T5 FLUORESCENT - MR16 G.E. F21WT/5/835/ECO - Q35MR16/C/CG12		1 - FLUOR: 1-LAMP ELECTRONIC ADVANCE ICN-2S28		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FA3: FLUORESCENT: ARCHITECTURAL 120 V 46 W ENVIRONMENT: ABOVE 50F & DRY. FLANGED MOUNTED WITH 1 LAMPS IN CROSS SECTION. SUPPLY WITH EXTENDED GIMBAL AND SNOOT FOR THE MR16 LAMPS. PROVIDE WITH (2) 35 WATT MR16 LAMPS.
			2100 L	3500 DEG K	PROGM	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FA4 FLUORESCENT: ARCHITECTURAL 7.75" H X 7.04" W X 4' L	FOCAL POINT FW2 BB 1T5 1C 120 E RC WH 4' LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT/ACCENT PERFERATED METAL --- PAINTED WHITE	1 - 28 WATT 46" T5 LINEAR FLUORESCENT G.E. F28W/T5/835/ECO		1 - FLUOR: 1-LAMP 42 KHz ELECTRONIC ADVANCE ICN-2S28		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FA4: FLUORESCENT: ARCHITECTURAL 120 V 34 W ENVIRONMENT: ABOVE 50F & DRY. PERMITER LINEAR WALLWASH FIXTURE WITH WHITE BAFFLE. ONE LAMP IN CROSS SECTION. SEE PLANS FOR REQUIRED LENGTHS.
			2900 L	3500 DEG K	PROGM	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FA6 FLUORESCENT: ARCHITECTURAL 4" H X 4" W X 3' PRJ	SHAPER 600-36-W-T5/ 2/21-120V-NA LITHONIA, METALUX SHEET STEEL	WALL SURFACE DIRECT/INDIRECT MATTE WHITE ACRYLIC --- NATURAL ALUMINIM	2 - 21 WATT 36" T5 LINEAR FLUORESCENT G.E. F21W/T5/835/ECO		1 - FLUOR: 2 OR 3 LAMP 42 KHz ELECTRONIC ADVANCE ICN-2M32-MC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FA6: FLUORESCENT: ARCHITECTURAL 120 V 50 W ENVIRONMENT: ABOVE 50F & DRY. DECORATIVE WALL LINEAR FIXTURE WITH NATURAL ALUMINUM END CAPS.
			2100 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FA7 FLUORESCENT: ARCHITECTURAL 5" H X 3.5" W X 4' PRJ	ALERA LIGHTING MDI 4 1U1DT5 W M WCB E U ZT DC LITHONIA, METALUX SHEET STEEL	WALL SURFACE DIRECT/INDIRECT WHITE CROSS BAFFLE --- METALLIC SILVER	2 - 28 WATT 46" T5 LINEAR FLUORESCENT G.E. F28W/T5/835/ECO		1 - FLUOR: 1-LAMP 42 KHz ELECTRONIC ADVANCE ICN-2S28		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FA7: FLUORESCENT: ARCHITECTURAL 120 V 68 W ENVIRONMENT: ABOVE 50F & DRY. ONE LAMP UP AND ONE LAMP DOWN. PROVIDE WITH ACRYLIC LENS ON TOP OF FIXTURE AND CROSS BAFFLE ON BOTTOM.
			2900 L	3500 DEG K	PROGM	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FC1 FLUORESCENT: SURFACE WRAP 2.5" H X 15.38" W X 4' L	COLUMBIA WC 4-3 32-E U --- LITHONIA, METALUX SHEET STEEL	CEILING SURFACE DIRECT .125" ACRYLIC PRISMATIC --- PAINTED WHITE	3 - 32 WATT 48" T8 LINEAR FLUORESCENT G.E. F32T8/LX/SPX35/HL/ECO		1 - FLUOR: 3 OF 4 LAMP 42 KHz ELECTRONIC ADVANCE REL-4P32-SC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FC1: FLUORESCENT: SURFACE WRAP 120 V 95 W ENVIRONMENT: ABOVE 50F & DRY.
			3100 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FD1 FLUORESCENT: DOWNLIGHT 7.125" H X 15.75" W X 17.5" L X 0 DIA	PRESCOLITE CFT632HEB-STF602H CL B6 --- LITHONIA, HALO SHEET STEEL	CEILING RECESSED DIRECT CLEAR LENS SEMI-SPEC CLEAR ALZAK CLEAR ALZAK	1 - 32 WATT TRIPLE BIAX FLUORESCENT G.E. F32TBX/835/A/ECO		1 - FLUOR: 1-LAMP 42 KHz ELECTRONIC AMBISTAR RCF-2S26-M1-BS-QS		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FD1: FLUORESCENT: DOWNLIGHT 120 V 36 W ENVIRONMENT: ABOVE 50 DEG F & WET. 6" DIA. LENSED DOWNLIGHT FIXTURE TO BE PROVIDED WITH MULTI-VOLT BALLAST.
			2400 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=12,000 HOURS	0 DEG F	<=20%	---	---	
FD2 FLUORESCENT: DOWNLIGHT 4.38" H X 14.56" W X 15.38" L X 0 DIA	GOTHAM LGFLP 1/32TRT 6SB CGL 120 PRESCOLITE, HALO SHEET STEEL	CEILING RECESSED DIRECT CLEAR LENS SEMI-SPEC CLEAR ALZAK CLEAR ALZAK	1 - 32 WATT TRIPLE BIAX FLUORESCENT G.E. F26DBX/835/ECO/4P		1 - FLUOR: 2-LAMP 42 KHz ELECTRONIC AMBISTAR RCF-2S26-M1-BS-QS		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FD2: FLUORESCENT: DOWNLIGHT 120 V 32 W ENVIRONMENT: -20F TO 120 DEG F & DAMP. 6" DIA. HORIZONTAL LENSED DOWNLIGHT.
			1710 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=12,000 HOURS	0 DEG F	<=20%	---	---	
FD3 FLUORESCENT: DOWNLIGHT 0.56" H X 15.87" W X 13.37" L X 0 DIA	PRESCOLITE PDRGF-32TRT- 6-WG-DWHB-120 LITHONIA, HALO SHEET STEEL	CEILING RECESSED DIRECT WHITE GLASS SEMI-SPEC CLEAR ALZAK CLEAR ALZAK	1 - 32 WATT TRIPLE BIAX FLUORESCENT G.E. F32TBX/835/A/ECO		1 - FLUOR: 1-LAMP 42 KHz ELECTRONIC AMBISTAR RCF-2S26-M1-BS-QS		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FD3: FLUORESCENT: DOWNLIGHT 120 V 36 W ENVIRONMENT: ABOVE 50 DEG F & DRY. 6" DIA. DOWNLIGHT WITH DECORATIVE DROPPED WHITE GLASS SHADE.
			2400 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=12,000 HOURS	0 DEG F	<=20%	---	---	
FG1 FLUORESCENT: GRID TROFFER 4.25" H X 24" W X 2' L	COLUMBIA JT8 22 3 17 G FS A12125 E U LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT .125" ACRYLIC PRISMATIC --- PAINTED WHITE	3 - 17 WATT 24" T8 LINEAR FLUORESCENT G.E. F17T8/XL/SPX35/ECO		1 - FLUOR: 3 OR 4 LAMP 42 KHz ELECTRONIC ADVANCE REL-4P32-SC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FG1: FLUORESCENT: GRID TROFFER 120 V 47 W ENVIRONMENT: ABOVE 50F & DRY.
			1350 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FG2 FLUORESCENT: GRID TROFFER 3.125" H X 24" W X 4' L	COLUMBIA JT8 24-3 32 G- FS A12125 E U LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT .125" ACRYLIC PRISMATIC --- PAINTED WHITE	3 - 32 WATT 48" T8 LINEAR FLUORESCENT G.E. F32T8/LX/SPX35/HL/ECO		1 - FLUOR: 3 OR 4 LAMP 42 KHz ELECTRONIC ADVANCE REL-4P32-SC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FG2: FLUORESCENT: GRID TROFFER 120 V 94 W ENVIRONMENT: ABOVE 50F & DRY.
			3100 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FH1 FLUORESCENT: HIGHBAY 27.9" H X 25.8" W X 25.8" L	G.E. LIGHTING OBC W 38 F O F E6 15 --- LITHONIA, COOPER ALUMINUM	PENDANT DIRECT ACRYLIC --- WHITE	8 - 32 WATT TRIPLE BIAX FLUORESCENT G.E. F32TBX/835/A/ECO		1 - FLUOR: 2-LAMP 42 KHz ELECTRONIC AMBISTAR RCF-2S26-M1-BS-QS		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FH1: FLUORESCENT: HIGHBAY 120 V 272W W ENVIRONMENT: ABOVE 50 DEG F & DRY. PROVIDE WITH CORD AND HOOK.
			2400 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=12,000 HOURS	0 DEG F	<=20%	---	---	
FS1 FLUORESCENT: OPEN STRIP 3" H X 4.43" W X 4' PRJ	COLUMBIA CS 4 2 32 E U --- LITHONIA, METALUX SHEET STEEL	WALL SURFACE DIRECT WHITE ACRYLIC --- PAINTED WHITE	2 - 32 WATT 48" T8 LINEAR FLUORESCENT G.E. F32T8/LX/SPX35/HL/ECO		1 - FLUOR: 3-LAMP 42 KHz ELECTRONIC ADVANCE REL-3P32-SC		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FS1: FLUORESCENT: OPEN STRIP 120 V 65 W ENVIRONMENT: ABOVE 50F & DRY.
			3100 L	3500 DEG K	PROGM	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
FW1 FLUORESCENT: EGRESS 7" H X 8" W X 7" PRJ X 0 DIA	SHAPER 682 8 WP CFL/2(26/3 2W-TRIPLE)-120V-ALP HUBBELL, LITHONIA SHEET STEEL	WALL SURFACE CUT-OFF WHITE ACRYLIC --- ALUMINUM PAINT	2 - 32 WATT TRIPLE BIAX FLUORESCENT G.E. F32TBX/835/A/ECO		1 - FLUOR: 2-LAMP 42 KHz ELECTRONIC AMBISTAR RCF-2S26-M1-BS-QS		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FW1: FLUORESCENT: EGRESS 120 V 68 W ENVIRONMENT: -20F TO 120 DEG F & WET. EXTERIOR EGRESS FIXTURE. EMERGENCY EGRESS.
			2400 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=12,000 HOURS	0 DEG F	<=20%	---	---	
FW2 FLUORESCENT: ENCLOSED & GASKETED 43" H X 8.37" W X 4' PRJ	SHAPER 674 43" WP T5 /2/21 277V ALP KIM, LIGHTOLIER SHEET STEEL	WALL SURFACE DIRECT MATTE WHITE ACRYLIC --- ALUMINUM PAINTED	2 - 21 WATT 33" T5 LINEAR FLUORESCENT G.E. F21W/T5/835/ECO		1 - FLUOR: 2-LAMP 42 KHz ELECTRONIC ADVANCE ICN-2S28		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		FW2: FLUORESCENT: ENCLOSED & GASKETED 120 V 48 W ENVIRONMENT: ABOVE 50F & DRY. LUMINOUS WALL SCONCE WITH DECORATIVE TRIM BARS.
			2100 L	3500 DEG K	PROGM	>=1.00	---	---	
			>=85	>=36,000 HOURS	0 DEG F	<=20%	---	---	
LU1 L.E.D: UNDER CABINET 1" H X 4.87" W X 35" L	WILLIAMS 1SF 3 L18/835 AF12 125 WRS/120 DRV 120 ALKCO, LITHONIA EXTRUDED ALUMINUM	UNDER CABINET DIRECT CLEAR POLYCARBONATE --- PEARL	1 - 21 WATT LED ARRAY G.E. LED28DP385-FL/TP		1 - LED DRIVER DRIVER PROVIDED WITH LAMP DRIVER PROVIDED WITH LAMP		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		LU1: L.E.D: UNDER CABINET 120 V 21 W ENVIRONMENT: ABOVE 50F & DRY. PROVIDE WITH ROCKER SWITCH.
			1000 L	4000 DEG K	INSTANT	>=1.00	---	---	
			>=83	>=50,000 HOURS	0 DEG F	<=20%	---	---	
LW1 L.E.D: WALL 4.75" H X 3" W X 15.25" L	BRUCK LIGHTING SYSTEMS 137 100 BK --- --- APPROVED ALTERNATE CAST ALUMINUM	CEILING RECESSED ADJUSTABLE CLEAR LENS --- BLACK	1 - 3 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		LW1: L.E.D: WALL 120 V 3 W ENVIRONMENT: ABOVE 50F & DRY. FLEXIBLE GOOSE NECK FIXTURE WITH BUILT-IN ROCKER SWITCH.
			500 L	3000 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
LX1 L.E.D: EXIT 6" H X 2" W X 13" L	DUAL-LITE LX U G W --- LITHONIA, FAIL-SAFE PLASTIC	UNIVERSAL DIRECT GREEN PLASTIC --- WHITE	1 - L.E.D. PROPRIATORY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - L.E.D. DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		LX1: L.E.D: EXIT 120 V 3.5 W ENVIRONMENT: ABOVE 50F & DRY. PUNCH ARROWS TO SHOW DIRECTION OF EGRESS.
			200 L	3500 DEG K	INSTANT	>=1.00	---	---	
			<50	>=50,000 HOURS	50 DEG F	<=20%	---	---	

GENERAL NOTES:

1. IF THE FIXTURE CATALOG NUMBER CONFLICTS WITH THE FIXTURE DESCRIPTION, THE FIXTURE DESCRIPTION TAKES PRECEDENCE.vvv
2. THE FIXTURE MANUFACTURER SHALL SUPPLY LAMPS AND ALL ACCESSORIES NECESSARY FOR THE INSTALLATION OF HIS FIXTURES.
3. THE COLOR TEMPERATURE OF ALL LAMPS SHALL BE THE SAME. CALL DISCREPANCIES IN THE SCHEDULE TO THE ENGINEER'S ATTENTION PRIOR TO RELEASING FIXTURES FOR MANUFACTURE.
4. BATTERIES IN BATTERY BACKED FLUORESCENT FIXTURES SHALL BE SIZED TO PROVIDE 50% OF A SINGLE LAMP RATED LUMEN OUTPUT FOR 90 MINUTES.
5. BALLASTS PROVIDED SHALL HAVE THE LOWEST SOUND RATING AVAILABLE FOR THEIR TYPE.
6. LAMPS PROVIDED SHALL HAVE THE LOWEST MERCURY CONTENT AVAILABLE FOR THEIR TYPE, AND SHALL BE TCLP COMPLIANT IF AVAILABLE.
7. SUBMIT AND RECEIVE APPROVAL FROM THE ENGINEER FOR ALL LIGHT FIXTURES, BALLASTS, AND BACK-UP BATTERIES PRIOR TO RELEASING FUXTURES FOR MANUFACTURE.

STATEMENT OF COMPLIANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE - 2009

SECTION 505.2 - INTERIOR LIGHTING CONTROLS

THIS SECTION REQUIRES A MANUAL LIGHTING CONTROL FOR EACH ROOM, EXCEPT SECURITY AREAS, EMERGENCY AREAS, AND MEANS OF EGRESS LIGHTING.
FOR THIS PROJECT, SWITCHES HAVE BEEN PROVIDED FOR EACH ROOM WHERE MANDATED.

SECTION 505.2.2.1 -ADDITIONAL INTERIOR LIGHTING CONTROLS

THIS SECTION REQUIRES A LIGHT REDUCING CONTROL FOR EACH ROOM, EXCEPT THOSE WITH ONLY ONE LUMINAIRE, OCCUPANT-SENSING DEVICE, PUBLIC AREAS, SLEEPING UNIT, OR SPACE LESS THAN 0.6 WATTS PER SQUARE FOOT.
FOR THIS PROJECT, THIS SECTION HAS BEEN COMPLIED WITH THROUGH THE USE OF BI-LEVEL SWITCHING OF FIXTURES.

SECTION 505.2.2.2 - AUTOMATIC LIGHTING SHUTOFF

THIS SECTION REQUIRES AN AUTOMATIC LIGHTING SYSTEM SHUTOFF DEVICE IN NON-RESIDENTIAL BUILDINGS OF 5000 SQUARE FEET OR MORE. THIS AUTOMATIC DEVICE SHALL BE A PROGRAMMABLE TIME-OF-DAY CONTROLLER, AN OCCUPANCY SENSOR, OR A SIGNAL FROM ANOTHER CONTROL OR ALARM SYSTEM WHICH INDICATED THAT THE BUILDING IS UNOCCUPIED.
BASED ON EXCEPTION #3 "SPACES WHERE AN AUTOMATIC SHUTOFF WOULD ENDANGER OCCUPANT SAFETY OR SECURITY" THIS DEVICE WILL NOT BE PROVIDED. THIS IS AN INDUSTRIAL BUILDING WHERE HEAVY MACHINERY IS CONSTANTLY IN MOTION, AND WHERE POTENTIALLY LIFE THREATENING OPERATIONS (WELDING) ARE BEING PERFORMED CONSTANTLY.

SECTION 505.2.4 - EXTERIOR LIGHTING CONTROLS

THIS SECTION REQUIRES EXTERIOR LIGHTING NOT INTENDED FOR 24-HOUR OPERATION TO HAVE AUTOMATIC SWITCHING OR PHOTOCELL CONTROLS. FURTHER, IT REQUIRES TIME SWITCHES TO BE ASTRONOMICAL, 7-DAY, AND A MINIMUM 4 HOUR BATTERY OR MECHANICAL BACK-UP.
FOR THIS PROJECT, THE EXTERIOR LIGHT SYSTEM IS CONTROLLED BY A PHOTOCELL TIME CLOCK COMBINATION.

SECTION 505.3 - TANDEM WIRING

THIS SECTION REQUIRES TANDEM WIRING FOR 1 AND 3 LAMP FIXTURES MOUNTED IN CONTINUOUS ROWS OR RECESSED IN ACCESSIBLE CEILINGS WITHIN 10' OF EACH OTHER. IT ALLOWS AN EXCEPTION IF ELECTRONIC HIGH FREQUENCY BALLASTS ARE USED OR IF FIXTURES ARE NOT ON SAME SWITCH CONTROL.
THIS PROJECT WAS DESIGNED UTILIZING ELECTRONIC HIGH FREQUENCY BALLASTS.

SECTION 505.4 - EXIT SIGNS

THIS SECTION REQUIRES INTERNALLY ILLUMINATED EXIT SIGNS NOT EXCEED 5W SIDE.
LED EXIT SIGNS HAVE BEEN SPECIFIED. THEIR POWER CONSUMPTION MEETS THIS REQUIREMENT.

SECTION 505.5 - INTERIOR LIGHTING POWER

THIS SECTION REQUIRES THAT THE CONNECTED LOAD FOR ALL INTERIOR LIGHTING NOT EXCEED POWER DENSITIES LISTED IN TABLE 505.5.2. IT ALLOWS EXCEPTIONS FOR MERCHANDISING.
FOR THIS PROJECT, THE TABLE REQUIRES A POWER DENSITY NOT EXCEEDING 1.0 WATTS PER SQUARE FOOT. THIS BUILDING IS 8,428 SQUARE FEET. THE LIGHTING SYSTEM CONSUMES 7,356 WATTS. THE POWER DENSITY FOR THIS PROJECT IS .87 WATTS PER SQUARE FOOT. THIS IS WITHIN THE MAXIMUM POWER DENSITY LISTED IN TABLE 505.5.2.

SECTION 505.6 - EXTERIOR LIGHTING POWER

THIS SECTION REQUIRES THAT ALL EXTERIOR LIGHT SOURCES OVER 100 WATTS HAVE AN EFFICACY OF AT LEAST 60 LUMENS PER WATT. IT ALLOWS AN EXCEPTION FOR LOW VOLTAGE LANDSCAPE LIGHTING. IT ALSO ALLOWS AN EXCEPTION, WHERE APPROVED, FOR HISTORICAL, SAFETY, SIGNAGE, OR EMERGENCY LIGHTING.
FOR THIS PROJECT, ALL EXTERIOR FIXTURES ARE METAL HALIDE OR FLUORESCENT, AND MEET THIS MINIMUM EFFICACY REQUIREMENT.

TABLE 506.6.2 - LIGHTING POWER DENSITIES FOR BUILDING EXTERIORS

THIS TABLE REQUIRES A MAXIMUM POWER DENSITY OF .15 WATT SQ FOR PARKING LOTS AND DRIVES.
FOR THIS PROJECT THE PARKING LOT LIGHTING POWER DENSITY IS .09 WATT.

TABLE 506.6.2 - LIGHTING POWER DENSITIES FOR BUILDING EXTERIORS

THIS TABLE REQUIRES A MAXIMUM POWER DENSITY OF 30 WATTS PER LINEAR FOOT OF DOOR WIDTH AT MAIN ENTERS, AND 20 WATTS PER LINEAR FOOT OF DOOR WIDTH AT OTHER BUILDING ENTRIES.
FOR THIS PROJECT: OUR LIGHTING POWER DENSITY AT MAIN ENTRIES IS 21 WATTS PER LINEAR FOOT, AND AT OTHER BUILDING ENTRIES IS 22 WATTS PER LINEAR FOOT.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SCHEDULES

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO: E501

PROJECT NO: 1443/140330

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ALTERNATE LIGHTING SCHEDULE

LIGHTING FIXTURE			LAMP		BALLAST / DRIVER TYPE 1		BALLAST / DRIVER TYPE 2		
DESIGNATION DESCRIPTION DIMENSIONS	MANUFACTURER CATALOG # FIRST HALF CATALOG # SECOND HALF APPROVED ALTERNATES HOUSING MATERIAL	MOUNTING AIMING DIFFUSER REFLECTOR HOUSING FINISH	QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		DESCRIPTION
			LUMENS	COLOR TEMPERATURE	STARTING METHOD	BALLAST FACTOR	STARTING METHOD	BALLAST FACTOR	
			C. R. I.	LAMP LIFE	MIN START TEMP	HARMONICS	START TEMP	HARMONICS	
ALA1 L.E.D: ARCHITECTURAL 4.75" H X 24" W X 2' L	COLUMBIA LTRE 22 35 VL G RFA E U --- LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT/INDIRECT RIBBED FROSTED ACRYLIC --- CLEAR ALZAK	1 - 44 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALA1: L.E.D: ARCHITECTURAL 120 V 44 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FA1'. TROFFER. PROVIDE FIXED OUTPUT DRIVER WITH VERY HIGH LUMEN OUTPUT.
			8350 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALA2 L.E.D: ARCHITECTURAL 4.75" H X 24" W X 2' L	COLUMBIA LTRE 22 35 V L G RFA ED U LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT/INDIRECT RIBBED FROSTED ACRYLIC --- CLEAR ALZAK	1 - 44 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALA2: L.E.D: ARCHITECTURAL 120 V 44 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FA2'. TROFFER. PROVIDE 0-10 DIMMING DRIVER WITH VERY HIGH LUMEN OUTPUT.
			8350 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALA6 L.E.D: ARCHITECTURAL 4" H X 4" W X 3' PRJ	SHAPER 600-36-W-L3/835-120V-NA --- LITHONIA, METALUX SHEET STEEL	WALL SURFACE DIRECT/INDIRECT MATTE WHITE ACRYLIC --- NATURAL ALUMINIM	1 - 19 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALA6: L.E.D: ARCHITECTURAL 120 V 19 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FA6'. DECORATIVE WALL LINEAR FIXTURE WITH NATURAL ALUMINUM END CAPS.
			2000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALD1 L.E.D: DOWNLIGHT 6.75" H X 12.625" W X 14" L X 6" DIA	PRESCOLITE LF6LEDG4 6LFLED7 G4 35K WT NCT B6 LITHONIA, HALO SHEET STEEL	CEILING RECESSED DIRECT CLEAR LENS --- CLEAR ALZAK	1 - 27 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALD1: L.E.D: DOWNLIGHT 120 V 27 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FD1'. PROVIDE WITH WHITE NON-CONDUCTIVE TRIM.
			2000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALD2 L.E.D: DOWNLIGHT 6.75" H X 12.625" W X 14" L X 6" DIA	PRESCOLITE LF6LEDG4 6LFLED7G 4 35K WT B6 SCA6D LITHONIA, HALO SHEET STEEL	CEILING RECESSED DIRECT CLEAR LENS --- CLEAR ALZAK	1 - 27 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALD2: L.E.D: DOWNLIGHT 120 V 27 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FD2'. PROVIDE WITH SLOPED CEILING ADAPTOR.
			2000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALD3 L.E.D: DOWNLIGHT 5.625" H X 7" W X 7" L	SHAPER 340--8-DI--LED835/1/18- 120V-SCSF-ERW6-CYC-DML LITHONIA, HALO SHEET STEEL	CEILING RECESSED DIRECT CLEAR LENS --- CLEAR ALZAK	1 - 15 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALD3: L.E.D: DOWNLIGHT 120 V 15 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FD3'. 7" DIA DOWNLIGHT WITH DECORATIVE DROPPED WHITE GLASS SHADE.
			1000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALG1 L.E.D: GRID TROFFER 4.25" H X 24" W X 2' L	COLUMBIA LJT 22 35 VL G FS A12125 E U LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT FROSTED LENS --- CLEAR ALZAK	1 - 51 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALG1: L.E.D: GRID TROFFER 120 V 51 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FG1'. PROVIDE FIXED OUTPUT DRIVER WITH VERY HIGH LUMEN OUTPUT.
			4550 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALG2 L.E.D: GRID TROFFER 3.125" H X 24" W X 4' L	COLUMBIA LJT 24 35 XL G FS A12125 E U LITHONIA, METALUX SHEET STEEL	CEILING RECESSED DIRECT FROSTED LENS --- CLEAR ALZAK	1 - 85 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALG2: L.E.D: GRID TROFFER 120 V 85 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FG2'. PROVIDE FIXED OUTPUT DRIVER WITH EXTRA HIGH LUMEN OUTPUT.
			8775 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALH1 L.E.D: HIGH BAY 30" H X 22.5" W X 22.5" L	HUBBELL LBX 112 L 2 35K A GR WA22 C4-4 HLP 2 ANTIQUE ST LIGHT, AAL ALUMINUM	PENDANT DIRECT PRISMATIC ACRYLIC --- WHITE	1 - 112 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALH1: L.E.D: HIGH BAY 208 V 112W W ENVIRONMENT: ABOVE 50 DEG F & DRY. ALTERNATE FOR 'MH1'. PROVIDE WITH CORD AND HOOK.
			19000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALS1 L.E.D: OPEN STRIP 3" H X 4.43" W X 4' L	COLUMBIA LCS 4 35 HL E U --- LITHONIA, METALUX SHEET STEEL	CEILING SURFACE DIRECT --- --- CLEAR ALZAK	1 - 55 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALS1: L.E.D: OPEN STRIP 120 V 55 W ENVIRONMENT: ABOVE 50F & DRY. ALTERNATE FOR 'FS1'. PROVIDE FIXED OUTPUT DRIVER WITH HIGH LUMEN OUTPUT.
			6800 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALW1 L.E.D: WALL 7" H X 8" W X 7" PRJ	SHAPER 682 8 WP CFL/2(26/3 2W-TRIPLE)-120V-ALP HUBBELL, LITHONIA SHEET STEEL	WALL SURFACE CUT-OFF WHITE ACRYLIC --- ALUMINUM PAINT	1 - 16 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALW1: L.E.D: WALL 120 V 16 W ENVIRONMENT: -20F TO 120 DEG F & WET. ALATERNATE FOR 'FW1'. EXTERIOR EGRESS FIXTURE. EMERGENCY EGRESS.
			1000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	
ALW2 L.E.D: WALL 43" H X 8.375" W X 4" PRJ	SHAPER 674 43" WP L4 /830 120V ALP HUBBELL, LITHONIA SHEET STEEL	WALL SURFACE DIRECT WHITE ACRYLIC --- ALUMINUM PAINT	1 - 28 WATT LED ARRAY SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		1 - STANDARD LED DRIVER SELECTED BY FIXTURE MANUFACTURER SELECTED BY FIXTURE MANUFACTURER		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALW2: L.E.D: WALL 120 V 28 W ENVIRONMENT: -20F TO 120 DEG F & WET. ALATERNATE FOR 'FW2'. EXTERIOR DECORATIVE FIXTURE.
			3000 L	3500 DEG K	INSTANT	>=1.00	---	---	
			>=82	>=50,000 HOURS	0 DEG F	<=20%	---	---	

ALTERNATE SITE LIGHTING SCHEDULE

LIGHTING FIXTURE			LAMP		BALLAST / DRIVER TYPE 1		BALLAST / DRIVER TYPE 2		
DESIGNATION DESCRIPTION DIMENSIONS	MANUFACTURER CATALOG # FIRST HALF CATALOG # SECOND HALF APPROVED ALTERNATES HOUSING MATERIAL	MOUNTING AIMING DIFFUSER REFLECTOR HOUSING FINISH	QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		QUANTITY - TYPE MANUFACTURER CATALOG NUMBER		DESCRIPTION
			LUMENS	COLOR TEMPERATURE	STARTING METHOD	BALLAST FACTOR	STARTING METHOD	BALLAST FACTOR	
			C. R. I.	LAMP LIFE	MIN START TEMP	HARMONICS	START TEMP	HARMONICS	
ALE2 L.E.D: CUT-OFF 22" H X 25" W X 25" L X 25" DIA	KIM 1A RA252 120L4 K BL HA12L-TM1 ANTIQUE ST LIGHT, AAL ALUMINUM	POLE CUT-OFF --- HYDORFORMED BLACK	1 - 120 L.E.D. ARRAY G.E. SELECTED BY FIXTURE MANUFACTURER		1 - L.E.D. ARRAY SELECTED BY FIXTURE MANUFACTURER ---		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALE2: L.E.D: CUT-OFF 208 V 126W W ENVIRONMENT: -20F TO 120 DEG F & WET. ALTERNATE FOR 'ME2'. PROVIDE KIM #CAL16-641188 BL-P 16' STEPPED ALUMINUM POLE AND BRACHET ARM. PROVIDE TYPE II DISTRIBUTION.
			10298 L	4200 DEG K	INSTANT	>=80	---	---	
			>=80	>=40,000 HOURS	-20 DEG F	<=20%	---	---	
ALE3 L.E.D: CUT-OFF 22" H X 25" W X 25" L X 25" DIA	KIM 1A RA254 120L4 K BL HA12L-TM1 ANTIQUE ST LIGHT, AAL ALUMINUM	POLE CUT-OFF --- HYDORFORMED BLACK	1 - 120 L.E.D. ARRAY G.E. SELECTED BY FIXTURE MANUFACTURER		1 - L.E.D. ARRAY SELECTED BY FIXTURE MANUFACTURER ---		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALE3: L.E.D: CUT-OFF 208 V 126W W ENVIRONMENT: -20F TO 120 DEG F & WET. ALTERNATE FOR 'ME3'. PROVIDE KIM #CAL16-641188 BL-P 16' STEPPED ALUMINUM POLE AND BRACHET ARM. PROVIDE TYPE IV DISTRIBUTION.
			10298 L	4200 DEG K	INSTANT	>=80	---	---	
			>=80	>=40,000 HOURS	-20 DEG F	<=20%	---	---	
ALE4 L.E.D: CUT-OFF 16.5" H X 16" W X 16" L X 17" DIA	KIM 1A RA172 60L4 K BL HA12S-TM1 ANTIQUE ST LIGHT, AAL ALUMINUM	POLE CUT-OFF --- HYDORFORMED BLACK	1 - 60 L.E.D. ARRAY G.E. SELECTED BY FIXTURE MANUFACTURER		1 - L.E.D. ARRAY SELECTED BY FIXTURE MANUFACTURER ---		SECOND BALLAST / DRIVER TYPE NOT REQUIRED --- ---		ALE4: L.E.D: CUT-OFF 208 V 68 W ENVIRONMENT: -20F TO 120 DEG F & WET. ALTERNATE FOR 'ME4'. PROVIDE KIM #CAS16-634188 BL-P 16' STEPPED ALUMINUM POLE AND BRACHET ARM. PROVIDE TYPE II DISTRIBUTION.
			5393 L	4200 DEG K	INSTANT	>=80	---	---	
			>=80	>=40,000 HOURS	-20 DEG F	<=20%	---	---	

MDC - DISTRIBUTION PANEL

RATINGS:
208/120 VOLTS 3 PHASE 4 WIRE
NEMA1 ENCLOSURE
600 AMP BUS

REQUIRED OPTIONS & ACCESSORIES:
COPPER BUS
SURFACE SINGLE TUB MOUNTING
28000 AIC

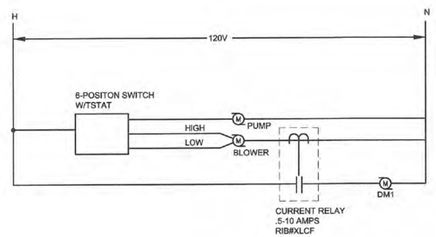
REQUIRED OPTIONS & ACCESSORIES:
GROUND BUS

LOAD TYPE AND CIRCUIT DESCRIPTION	#/VA	AMPS		AMPS	#/VA	LOAD TYPE AND CIRCUIT DESCRIPTION
SUBFEED: ---	1 19841				2 16325	SUBFEED: ---
SUBFEED: PANEL LA	3 15686	200		200	4 21823	SUBFEED: PANEL LB
SUBFEED: ---	5 18671				6 15327	SUBFEED: ---
EQUIPMENT: ---	7 6133				8 10777	SUBFEED: ---
EQUIPMENT: CR2 SHOP: MOBILE COMPRESSOR	9 6133	60		100	10 7803	SUBFEED: PANEL ATS
EQUIPMENT: ---	11 6133				12 6648	SUBFEED: ---
SUBFEED: ---	13 12875				14 0	SPACE: ---
SUBFEED: PANEL LC	15 12825	200			16 0	SPACE: ---
SUBFEED: ---	17 12825				18 0	SPACE: ---
SPACE: ---	19 0				20 0	SPACE: ---
SPACE: ---	21 0				22 0	SPACE: ---
SPACE: ---	23 0				24 0	SPACE: ---

LOADS BY TYPE (KVA)	CONNECTED	DEMAND
LIGHTING	10.1	12.6
RECEPTACLE	25.4	17.7
MOTOR - HEATING	3.7	3.7
MOTOR - COOLING	13.2	13.2
MOTOR - YR RND	15.5	15.5
ELECTRIC HEAT	5.0	5.0

	A	B	C	TOTAL
CONNECTED AMPS:	549.2	535.2	498.3	526.9
DEMAND AMPS:	407.4	378.1	352.8	360.7
CONNECTED KVA:	66.0	64.3	59.6	189.8
DEMAND KVA:	48.9	45.4	42.4	129.9
BALANCE % :	A-B 97.4	B-C 92.7	C-A 90.4	

LOAD BY TYPE (KVA)	CONNECTED	DEMAND
KITCHEN	14.1	14.1
PROCESS	41.5	20.7
MISCELLANEOUS	25.4	12.7
SPACE	0.0	0.0
SPARE	36.0	18.0
LARGEST MOTOR	1.6	0.4



EC1 / EC2 WIRING DIAGRAM

NO SCALE

ADJUST CURRENT RELAY TO OPEN DAMPER WHEN BLOWER MOTOR IS RUNNING AT LOW SPEED.

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SCHEDULES

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: **04/10/2015** SHEET NO: **E502**

PROJECT NO: **1443/140330**

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MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT DESIGNATION DESCRIPTION	RATINGS SUPPLIED BY INSTALLED BY WIRED BY	BRANCH CIRCUIT RACEWAY PHASE WIRE NEUTRAL WIRE GROUND WIRE	OVERCURRENT DEVICE RATING DEVICE TYPE DEVICE LOCATION	CONTROLLER TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	DISCONNECT @ CONTROLLER TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	DISCONNECT @ EQUIPMENT TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	CONTROL DEVICE TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	EQUIPMENT DESIGNATION & DESCRIPTION
AF1 CEILING AIR FILTER	120V 13.2A 1PH 2W OWNER MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER MDC	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	CONTROL PANEL NEMA 1 EQUIP. MFGR CONTROL SUB CONTROL SUB	AF1: CEILING AIR FILTER RECEIVE AND INSTALL CONTROL PANEL SUPPLIED WITH FILTER. WIRE TO CONTACTS IN ALERTING SYSTEM TO ACTIVATE FILTER WHEN ALARM IS RECEIVED.
AF2 CEILING AIR FILTER	120V 13.2A 1PH 2W OWNER MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 OWNER EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	CONTROL PANEL NEMA 1 EQUIP. MFGR ELECTRICAL SUB ELECTRICAL SUB	AF2: CEILING AIR FILTER RECEIVE AND INSTALL CONTROL PANEL SUPPLIED WITH FILTER. WIRE TO CONTACTS IN ALERTING SYSTEM TO ACTIVATE FILTER WHEN ALARM IS RECEIVED.
AF3 CEILING AIR FILTER	120V 13.2A 1PH 2W OWNER MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 OWNER EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	CONTROL PANEL NEMA 1 EQUIP. MFGR ELECTRICAL SUB ELECTRICAL SUB	AF3: CEILING AIR FILTER RECEIVE AND INSTALL CONTROL PANEL SUPPLIED WITH FILTER. WIRE TO CONTACTS IN ALERTING SYSTEM TO ACTIVATE FILTER WHEN ALARM IS RECEIVED.
CU1 COOLING: DIRECT EXPANSION	208V 28.4A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #6 COPPER NO NEUTRAL #10 COPPER	40 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 3 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB CONTROL SUB CONTROL SUB	CU1: COOLING: DIRECT EXPANSION ASSOCIATED WITH FR-1.
CU2 COOLING: DIRECT EXPANSION	208V 14.3A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER NO NEUTRAL #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB CONTROL SUB CONTROL SUB	CU2: COOLING: DIRECT EXPANSION ASSOCIATED WITH FR-2.
DF1 MISCELLANEOUS: DRINKING FOUNTAIN (1/4 HP)	120V 4.2A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED — — — —	DF1: MISCELLANEOUS: DRINKING FOUNTAIN (1/4 HP) COORDINATE RECEPTACLE LOCATION WITH DRINKING FOUNTAIN HOUSING.
EC1 COOLING: EVAPORATIVE (3/4 HP)	120V 13.2A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	SERVICE SWITCH NEMA 3R EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	6-POS SWITCH-W/TSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	EC1: COOLING: EVAPORATIVE (3/4 HP) IF BREEZE AIRE ALTERNATE IS SELECTED, WIRE THERMOSTAT PER MANUFACTURER'S SHOP DRAWINGS. WIRE DAMPER DM1 PER WIRING DIAGRAM ON THE PLANS.
EC2 COOLING: EVAPORATIVE (3/4 HP)	120V 13.2A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONFUSED SWITCH — — — —	SERVICE SWITCH NEMA 3R EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	6-POS SWITCH-W/TSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	EC2: COOLING: EVAPORATIVE (3/4 HP) IF BREEZE AIRE ALTERNATE IS SELECTED, WIRE THERMOSTAT PER MANUFACTURER'S SHOP DRAWINGS. WIRE DAMPER DM1 PER WIRING DIAGRAM ON PLANS.
EF01 FAN: EXHAUST-SHOWER 115	120V 0.5A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	OCC SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF01: FAN: EXHAUST-SHOWER 115 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF02 FAN: EXHAUST-SHOWER 114	120V 0.5A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	OCC SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF02: FAN: EXHAUST-SHOWER 114 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF03 FAN: EXHAUST-SHOWER 113	120V 0.5A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	OCC SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF03: FAN: EXHAUST-SHOWER 113 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF04 FAN: EXHAUST-TOILET 105	120V 1.8A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	OCC SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF04: FAN: EXHAUST-TOILET 105 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF05 FAN: EXHAUST-BUNKER GR 133	120V 0.8A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF05: FAN: EXHAUST-BUNKER GR 133 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF06 FAN: EXHAUST-SHOP 136	120V 0.7A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF06: FAN: EXHAUST-SHOP 136 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF07 FAN: EXHAUST-STORAGE 137	120V 0.2A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	EF07: FAN: EXHAUST-STORAGE 137 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF08 FAN: EXHAUST-KITCHEN 108	120V 1.3A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 3R ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	SPEED CTL IN HOOD NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	EF08: FAN: EXHAUST-KITCHEN 108 MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
EF09 FAN: EXHAUST-HOSE TOWER 135	120V 0.7A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	NONE REQUIRED — — — —	HUMIDISTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	EF09: FAN: EXHAUST-HOSE TOWER 135 RECEIVE SOLID STATE SPEED CONTROL FROM MECHANICAL CONTRACTOR. MOUNT AND WIRE IN FAN HOUSING. BALANCING CONTRACTOR TO ADJUST AT COMPLETION OF JOB.
FR1 HEATING: FURNACE (1 HP)	120V 13.5A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	— — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB CONTROL SUB CONTROL SUB	FR1: HEATING: FURNACE (1 HP) PROVIDE 1/2" EMT CONDUIT TO FURNACE FROM CONTROLS. PROVIDE A 40 VA CONTROL POWER TRANSFORMER. MOUNT PER MECH CONTRACTOR. INTERLOCK WITH CU-1 PER MANUFACTURER'S SHOP DRAWINGS.
FR2 HEATING: FURNACE (3/4 HP)	120V 13.2A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	— — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB CONTROL SUB CONTROL SUB	FR2: HEATING: FURNACE (3/4 HP) PROVIDE 1/2" EMT CONDUIT TO FURNACE FROM CONTROLS. PROVIDE A 40 VA CONTROL POWER TRANSFORMER. MOUNT PER MECH CONTRACTOR. INTERLOCK WITH CU-2 PER MANUFACTURER'S SHOP DRAWINGS.
HP1A COOLING: SPLIT SYSTEM FITNESS #132	208V 13.8A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER NO NEUTRAL #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	HP1A: COOLING: SPLIT SYSTEM FITNESS #132 WIRE CONDENSER (HP1B) AND EVAPORATOR (HP1A) TOGETHER PER MANUFACTURER'S SHOP DRAWINGS.
IR1 HEATING: GAS INFRARED HEATER	120V 1.0A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	— — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	IR1: HEATING: GAS INFRARED HEATER UNIT IR2, IR3 AND IR4 SIMILAR TO IR1.
IR2 HEATING: GAS INFRARED HEATER	120V 1.0A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	— — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	IR2: HEATING: GAS INFRARED HEATER
IR3 HEATING: GAS INFRARED HEATER	120V 1.0A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	— — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	IR3: HEATING: GAS INFRARED HEATER
IR4 HEATING: GAS INFRARED HEATER	120V 1.0A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	— — — — —	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	IR4: HEATING: GAS INFRARED HEATER
PC1 PUMP: DOMESTIC HW CIRCULATION	120V 3.2A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	AQUASTAT NEMA 1 MECH. SUB MECH. SUB ELECTRICAL SUB	PC1: PUMP: DOMESTIC HW CIRCULATION
SS1A COOLING: SPLIT SYSTEM IT/AV 111	208V 16.5A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER NO NEUTRAL #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED — — — —	NONFUSED SWITCH NEMA 3R ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB ELECTRICAL SUB ELECTRICAL SUB	SS1A: COOLING: SPLIT SYSTEM IT/AV 111 WIRE CONDENSER (SS1B) AND EVAPORATOR (SS1A) TOGETHER PER MANUFACTURER'S SHOP DRAWINGS.
WH1 GAS FIRED WATER HEATER	120V 1.7A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED — — — —	NONE REQUIRED — — — —	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	THERMOSTAT NEMA 1 MECH. SUB CONTROL SUB CONTROL SUB	WH1: GAS FIRED WATER HEATER

LA - PANELBOARD

RATINGS: 208/120 VOLTS 3 PHASE 4 WIRE, NEMA1 ENCLOSURE, 200 AMP BUS

REQUIRED OPTIONS & ACCESSORIES: COPPER BUS, SURFACE SINGLE TUB MOUNTING, SERIES RATED

REQUIRED OPTIONS & ACCESSORIES: GROUND BUS

LOAD TYPE AND CIRCUIT DESCRIPTION	#/VA	AMPS		AMPS	#/VA	LOAD TYPE AND CIRCUIT DESCRIPTION
LIGHTING: LOUNGE, KITCHEN, PANTRY, LAUNDRY, HALL 104 & LOBBY	1 1126	20		20	2 832	LIGHTING: PARKING LOT
OUTLET: TOILET 113	3 180	20		20	4 832	LIGHTING: —
OUTLET: TOILET 114	5 180	20		20	6 710	LIGHTING: BUILDING PERIMETER, FLAG LIGHT & ENTRY SIGN
OUTLET: TOILET 115	7 180	20		20	8 1260	OUTLET: SLEEP 124, HALL 126 ARC FAULT BREAKER
OUTLET: SLEEP 116 & EXTERIOR ARC FAULT BREAKER	9 1260	20		20	10 1260	OUTLET: SLEEP 123 & EXTERIOR ARC FAULT BREAKER
~~SPARE: UNALLOCATED FUTURE~~ ~~ROOF TOP GFCI~~	11 1200	20		20	12 1260	OUTLET: SLEEP 122 & EXTERIOR ARC FAULT BREAKER
OUTLET: SLEEP 119	13 1080	20		30 35	14 1127	~~EQUIPMENT: CW1 MISC: CLOTHER WASHER~~ ~~ARC FAULT BREAKER~~
OUTLET: SLEEP 120 & LAUNDRY	15 1260	20		30 45	16 1127	~~EQUIPMENT: CW1 MISC: CLOTHER WASHER~~ ~~ARC FAULT BREAKER~~ DRYER
OUTLET: HALLS	17 900	20		20	18 200	EQUIPMENT: ~~GD1 MISC: (2) - GAS CLOTHER DRYERS~~ ARC FAULT BREAKER — CW1 WASHERS
LIGHTING: SLEEPING ROOMS & HALL 112 ARC FAULT BREAKER	19 862	20		20 20	20 83	EQUIPMENT: E-09 FAN: EXHAUST-HOSE TOWER 135
EQUIPMENT: HD1 FIXED APPLIANCE: RANGE HOOD	21 500	15		30 40	22 1127	~~EQUIPMENT: RE1 KITCHEN: REFRIGERATOR~~ ~~GFIC BREAKER~~ DRYER
EQUIPMENT: EF08 FAN: EXHAUST-KITCHEN 108	23 180	20		20	24 1127	EQUIPMENT: RE1 KITCHEN: REFRIGERATOR GFIC BREAKER
EQUIPMENT: RA1 FIXED APPLIANCE: GAS RANGE	25 667	15		20	26 1200	SPARE: UNALLOCATED FUTURE EQUIP. RE1 KITCHEN REFER BREAKER GFCI
OUTLET: KITCHEN COUNTER ARC FAULT BREAKER	27 360	20		20	28 540	OUTLET: KITCHEN COUNTER ARC FAULT BREAKER
EQUIPMENT: CM1 KITCHEN: DUAL COFFEE MAKER VIA TRANSFORMER	29 2683	30		20	30 1200	~~SPARE: UNALLOCATED FUTURE~~ VALVE BOX HEATER
EQUIPMENT: —	31 2683			20	32 1500	EQUIPMENT: MW1 KITCHEN: MICROWAVE ARC FAULT BREAKER
OUTLET: KITCHEN ISLAND ARC FAULT BREAKER	33 540	20		20	34 608	~~EQUIPMENT: VH1 WATER HEATER & PC1 HW CIRC PUMP~~ SPARE
EQUIPMENT: DW1 KITCHEN: DISH WASHER GFIC BREAKER	35 1500	20		40	36 2954	EQUIPMENT: CU1 COOLING: DIRECT EXPANSION
EQUIPMENT: DW1 KITCHEN: DISH WASHER GFIC BREAKER	37 1500	20			38 2954	EQUIPMENT: —
EQUIPMENT: DL1 KITCHEN: GARBAGE DISPOSAL (3/4 HP) ARC FAULT BREAKER	39 1588	20		20	40 1487	EQUIPMENT: CU2 COOLING: DIRECT EXPANSION
SPARE: UNALLOCATED FUTURE	41 1200	20			42 1487	EQUIPMENT: —
SPARE: UNALLOCATED FUTURE	43 1200	20		20	44 1588	EQUIPMENT: EC1 COOLING: EVAPORATIVE (3/4 HP)
EQUIPMENT: HP1A COOLING: SPLIT SYSTEM FITNESS #132	45 1588	20		20	46 1588	EQUIPMENT: EC2 COOLING: EVAPORATIVE (3/4 HP)
EQUIPMENT: —	47 1430			20	48 480	EQUIPMENT: IR1, IR2, IR2, & IR4 HEATING: GAS INFRARED HEATERS —

LOADS BY TYPE (KVA)	CONNECTED	DEMAND
LIGHTING	4.4	5.5
RECEPTACLE	10.3	10.1
MOTOR - HEATING	0.5	0.5
MOTOR - COOLING	12.1	12.1
MOTOR - YR RND	6.0	6.0
ELECTRIC HEAT	0.0	0.0

	A	B	C	TOTAL
CONNECTED AMPS:	165.2	130.6	155.5	150.4
DEMAND AMPS:	156.7	128.0	137.5	140.4
CONNECTED KVA:	19.8	15.7	18.7	54.2
DEMAND KVA:	18.8	15.4	16.5	50.6
	A-B	B-C	C-A	
BALANCE % :	79.1	84.0	94.1	

LOAD BY TYPE (KVA)	CONNECTED	DEMAND
KITCHEN	12.6	12.6
PROCESS	0.0	0.0
MISCELLANEOUS	2.5	1.2
SPACE	0.0	0.0
SPARE	6.0	3.0
LARGEST MOTOR	0.5	0.1

LB - PANELBOARD

RATINGS: 208/120 VOLTS 3 PHASE 4 WIRE, NEMA1 ENCLOSURE, 200 AMP BUS

REQUIRED OPTIONS & ACCESSORIES: COPPER BUS, SURFACE SINGLE TUB MOUNTING, SERIES RATED

REQUIRED OPTIONS & ACCESSORIES: GROUND BUS

LOAD TYPE AND CIRCUIT DESCRIPTION	#/VA	AMPS		AMPS	#/VA	LOAD TYPE AND CIRCUIT DESCRIPTION
EQUIPMENT: EF05 FAN: EXHAUST-BUNKER GR 133	1 69	20		20	2 1322	LIGHTING: FITNESS, HOSE TOWER, SHOP, BUNKER GEAR & STORAGE
OUTLET: APPARATUS BAYS & BUNKER GEAR	3 1260	20		20	4 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
EQUIPMENT: EF07 FAN: EXHAUST-STORAGE 137	5 26	20		20	6 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
EQUIPMENT: EF06 FAN: EXHAUST-SHOP 136	7 83	20		20	8 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
OUTLET: SHOP, STORAGE, EXTERIOR & APPARATUS BAYS	9 1080	20		20	10 800	MISCELLANEOUS: FITNESS (TVS)
OUTLET: SHOP - SURFACE RACEWAY	11 900	20		20	12 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
OUTLET: SHOP - SURFACE RACEWAY	13 900	20		20	14 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
EQUIPMENT: —	15 2042			20	16 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
EQUIPMENT: EX1 MISC: EXTRACTOR	17 2042	20		20	18 800	MISCELLANEOUS: FITNESS (MACHINE CIRCUIT)
EQUIPMENT: —	19 2042			20	20 800	MISCELLANEOUS: APPARATUS BAY #1 - CORD REEL
EQUIPMENT: CR1 SHOP: COMPRESSOR (3 HP)	21 1945	20		20	22 800	MISCELLANEOUS: APPARATUS BAY #2 - CORD REEL
EQUIPMENT: —	23 1945			20	24 800	MISCELLANEOUS: APPARATUS BAY #3 - CORD REEL
EQUIPMENT: WR1 SHOP: WELDER VIA TRANSFORMER	25 4160	50		20	26 1080	OUTLET: APPARATUS BAYS, EMS STOR, IT/AV, HALL 104
EQUIPMENT: —	27 4160			20	28 1260	OUTLET: APPARATUS BAYS, MECH, ELEC, PANTRY
OUTLET: TOILET 105	29 180	20		20	30 540	OUTLET: SCBA
EQUIPMENT: DF1 MISCELLANEOUS: DRINKING FOUNTAIN (1/4 HP)	31 506	20		20	32 83	EQUIPMENT: EF09 FAN: EXHAUST-HOSE TOWER 135
OUTLET: LOBB

WIRING DEVICE SCHEDULE

DEVICE DESIGNATION DESCRIPTION	MANUFACTURER CATALOG NUMBER ALTERNATE MFG ALTERNATE MFG	ENVIRONMENT COLOR POWER / CURRENT VOLTAGE	BOX SIZE MATERIAL MOUNTING DEPTH / CONNECTIONS	PLASTER RING MOUNTING SIZE OPENING SIZE COLLAR DEPTH COLLAR MATERIAL	COVER ENVIRONMENT MATERIAL OPENING COLOR	ASSEMBLY DESCRIPTION
D11 DIMMER: FLOURESCENT 2-WIRE	LEVITON AWSMG--XDW LUTRON PASS & SEYMOUR	ABOVE 50F & DRY WHITE 2000W / — 120/277V	2 GANG PRESSED STEEL FLUSH 3-1/2" / 1/2" & 3/4" KO'S	NOT REQUIRED — — —	ABOVE 50F & DRY 302 STAINLESS STEEL DECORA SILVER	D11: DIMMER: FLOURESCENT 2-WIRE | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | 3-WAY APPLICATIONS: USE #AWSRG-00W REMOTE | SOLID STATE TRIAC | SQUARE LAW DIMMING | SURGE & ELECTROSTATIC DISCHARGE PROTECTION | WITH SWITCH | RFI FILTER | LOCATION INDICATOR I COORDINATE DIMMER WITH FIXTURE BALLAST.
D12 DIMMER: FLOURESCENT 3-WIRE	LEVITON AWSMG--HDW LUTRON PASS & SEYMOUR	ABOVE 50F & DRY WHITE 2000W / — 120/277V	1 GANG PRESSED STEEL FLUSH 3-1/2" / 1/2" & 3/4" KO'S	NOT REQUIRED — — —	ABOVE 50F & DRY 302 STAINLESS STEEL DECORA SILVER	D12: DIMMER: FLOURESCENT 3-WIRE | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | 3-WAY APPLICATIONS: USE #AWSRG-00W REMOTE | SOLID STATE TRIAC | SQUARE LAW DIMMING | SURGE & ELECTROSTATIC DISCHARGE PROTECTION | WITH SWITCH | RFI FILTER | LOCATION INDICATOR
IN1 DISCONNECT: NON-FUSED	SQUARE D HU361 SIEMENS G.E.	ABOVE 32F & DRY GRAY --- / 30A 3PHASE 600V	6.5" W X 14.6" H PRESSED STEEL SURFACE 4.88" D / 1/2" & 3/4" KO'S	— — — —	— — — —	IN1: DISCONNECT: NON-FUSED | DEVICE GRADE: INDUSTRIAL | DEVICE POLES: 3-POLE 3-WIRE WITH NEUTRAL | NEMA ENCLOSURE: TYPE 1
IN2 DISCONNECT: NON-FUSED	SQUARE D HU362 SIEMENS G.E.	ABOVE 32F & DRY GRAY --- / 60A 3PHASE 600V	9" W X 17.5" H PRESSED STEEL SURFACE 6.38" D / 1/2" & 3/4" KO'S	— — — —	— — — —	IN2: DISCONNECT: NON-FUSED | DEVICE GRADE: INDUSTRIAL | DEVICE POLES: 3-POLE 3-WIRE WITH NEUTRAL | NEMA ENCLOSURE: TYPE 1
IN3 DISCONNECT: NON-FUSED	SQUARE D DU321RB SIEMENS G.E.	-20F TO 120F & WET GRAY --- / 30A 3PHASE 240V	7.25" W X 9.63" H PRESSED STEEL SURFACE 3.75" D / 1/2" & 3/4" KO'S	— — — —	— — — —	IN3: DISCONNECT: NON-FUSED | DEVICE GRADE: INDUSTRIAL | DEVICE POLES: 3-POLE 3-WIRE WITH NEUTRAL | NEMA ENCLOSURE: TYPE 3R
IN4 DISCONNECT: NON-FUSED	SQUARE D DU322RB SIEMENS G.E.	-20F TO 120F & WET GRAY --- / 60A 3PHASE 240V	7.25" W X 9.63" H PRESSED STEEL SURFACE 3.75" D / 1/2" & 3/4" KO'S	— — — —	— — — —	IN4: DISCONNECT: NON-FUSED | DEVICE GRADE: INDUSTRIAL | DEVICE POLES: 3-POLE 3-WIRE WITH NEUTRAL | NEMA ENCLOSURE: TYPE 3R
JP1 JUNCTION BOX: POWER	WIRING DEVICE NOT REQUIRED — —	ABOVE 50F & DRY — NA / NA 120-480V	2 GANG PRESSED STEEL FLUSH OR SURFACE 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL BLANK SILVER	JP1: JUNCTION BOX: POWER | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
JS1 JUNCTION BOX: SIGNAL	WIRING DEVICE NOT REQUIRED — —	ABOVE 50F & DRY — NA / NA 120-480V	2 GANG PRESSED STEEL FLUSH OR SURFACE 2-1/8" / 1/2" 3/4" & 1" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL BLANK SILVER	JS1: JUNCTION BOX: SIGNAL | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
MP1 MULTIPORT	MULTIPORT JACKS BY OWNER — —	ABOVE 50F & DRY SILVER — / — —	2 GANG PRESSED STEEL FLUSH --- / 1" & 1-1/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 50F & DRY COVER AND JACKS BY OWNER —	MP1: MULTIPORT | DEVICE GRADE: COMMERCIAL | FAR SIDE BOX SUPPORT: REQUIRED | BOX TO BE 5" X 5" X DEEP SIEMON #BB55-03 WITH 5/8" 2 GANG PLASTER RING SIEMON #BES5-2C.
OC1 OCC SENSOR	LEVITON OSC20-M0W HUBBELL PASS & SEYMOUR	ABOVE 50F & DRY WHITE 1200W / — 120V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	SEPARATE COVER NOT REQUIRED — —	OC1: OCC SENSOR | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | MOUNTING: CEILING | COVERAGE: 2000 SQUARE FEET | FIELD OF VIEW: 360 DEGREES | AMBIENT LIGHT OVERRIDE: PHOTOCELL | POWER RELAY: OSP20-0D0
OS1 OCC SENSOR	LEVITON OSSMT-MD HUBBELL PASS & SEYMOUR	ABOVE 50F & DRY WHITE 1200W / — 120V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 50F & DRY 302 STAINLESS STEEL DECORA SILVER	OS1: OCC SENSOR | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | MOUNTING: WALL | COVERAGE: 2400 SQUARE FEET | FIELD OF VIEW: ADJUSTABLE 32 TO 180 DEGREES | AMBIENT LIGHT OVERRIDE: PHOTOCELL
RD1 RECEPTACLE: DUPLEX	LEVITON 16242 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 15A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RD1: RECEPTACLE: DUPLEX | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-15R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
RD2 RECEPTACLE: DUPLEX	LEVITON 16342 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 20A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RD2: RECEPTACLE: DUPLEX | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-20R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
RD3 RECEPTACLE: DUPLEX	LEVITON 16242-E PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 15A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RD3: RECEPTACLE: DUPLEX | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-15R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
RG1 RECEPTACLE: GFCI	LEVITON 7599 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 15A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RG1: RECEPTACLE: GFCI | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-15R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | BUTTON COLOR TO MATCH DEVICE COLOR.
RG2 RECEPTACLE: GFCI	LEVITON 7899 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 20A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RG2: RECEPTACLE: GFCI | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-20R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | BUTTON COLOR TO MATCH DEVICE COLOR.
RG3 RECEPTACLE: GFCI	LEVITON 7899-E PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 20A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RG3: RECEPTACLE: GFCI | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-20R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | BUTTON COLOR TO MATCH DEVICE COLOR.
RO1 RECEPTACLE: OUTDOOR	LEVITON W7599 PASS & SEYMOUR HUBBELL	-20F TO 120F & WET WHITE --- / 15A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	-20F TO 120F & WET CAST ALUMINUM DECORA SILVER	RO1: RECEPTACLE: OUTDOOR | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-15R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | GFCI | PROVIDE LOCKABEL METAL IN-USE COVER. WIRING DEVICE TO BE CORROSION RESISTANT.
RQ1 RECEPTACLE: QUAD	LEVITON 16242 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 15A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 2 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RQ1: RECEPTACLE: QUAD | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-15R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
RQ2 RECEPTACLE: QUAD	LEVITON 16242-E PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 15A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 2 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RQ2: RECEPTACLE: QUAD | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | DEVICE NEMA CONFIGURATION: 5-15R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
RS1 RECEPTACLE: SINGLE	LEVITON 5374 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 50A 250V	2 GANG PRESSED STEEL SURFACE 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY STAMPED STEEL ROUND SILVER	RS1: RECEPTACLE: SINGLE | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: ROUND | DEVICE NEMA CONFIGURATION: 6-50R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | WELDING RECEPTACLE.
RS2 RECEPTACLE: SINGLE LOCKING	LEVITON 2310 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 20A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	1 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RS2: RECEPTACLE: SINGLE LOCKING | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: OVAL | DEVICE NEMA CONFIGURATION: LR-20R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | MATCH PLUG CONNECTOR TO OUTLET.
RS3 RECEPTACLE: SINGLE	LEVITON 9460 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 60A 250V	2 GANG PRESSED STEEL SURFACE 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY STAMPED STEEL ROUND SILVER	RS3: RECEPTACLE: SINGLE | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: ROUND | DEVICE NEMA CONFIGURATION: 14-60R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | COMPRESSOR RECEPTACLE.
RS4 RECEPTACLE: SINGLE LOCKING	LEVITON 2613 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY BLACK --- / 30A 125V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	1 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	RS4: RECEPTACLE: SINGLE LOCKING | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: OVAL | DEVICE NEMA CONFIGURATION: 5-30R | DEVICE POLES: 2-POLE 3-WIRE GRND | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | PROVIDE RECEPTACLE AT END OF 10/4 SO CABLE INSIDE NETWORK RACK FOR UPS.
S11 SWITCH: SPST	LEVITON 5691-2 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 15A 120/277V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	S11: SWITCH: SPST | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
S12 SWITCH: SPST	LEVITON CSB1-20 PASS & SEYMOUR HUBBELL	-20F TO 120F & WET WHITE --- / 20A 120/277V	2 GANG CAST ALUMINUM SURFACE 2-1/8" / 3/4" THREADED HUB	— — — —	-20F TO 120F & WET PAINTED STEEL TOGGLE SILVER	S12: SWITCH: SPST | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: TOGGLE | NEMA ENCLOSURE: TYPE 3R | EQUIPMENT DISCONNECT SWITCH INSTALLED OUT DOORS WITH WEATHERPROOF COVER.
S13 SWITCH: SPST	LEVITON CSB1-20 PASS & SEYMOUR HUBBELL	ABOVE 50F & DRY WHITE --- / 20A 120/277V	2 GANG CAST ALUMINUM SURFACE 2-1/8" / 1/2" 3/4" & 1" KO'S	— — — —	ABOVE 50F & DRY PAINTED STEEL TOGGLE SILVER	S13: SWITCH: SPST | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: TOGGLE | NEMA ENCLOSURE: TYPE 1 | EQUIPMENT DISCONNECT SWITCH.
S1T TIMER SWITCH: SPST	LEVITON LT802-1L-W PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 20A 120/277V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	S1T: TIMER SWITCH: SPST | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1 | BUTTONS FOR .24, .5, 1 & 2 HOURS.
S21 SWITCH: DPST	LEVITON 5602-2 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 15A 120/277V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	S21: SWITCH: DPST | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
S31 SWITCH: THREE WAY	LEVITON 5693-2 PASS & SEYMOUR HUBBELL	ABOVE 32F & DRY WHITE --- / 15A 120/277V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	S31: SWITCH: THREE WAY | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: DECORA | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1
SL1 SWITCH: SPST - LOW VOLTAGE	DOUGLAS WR8501/WN3700 WATTSTOPPER —	ABOVE 32F & DRY IVORY --- / 1A 24V	2 GANG PRESSED STEEL FLUSH 2-1/8" / 1/2" & 3/4" KO'S	2 GANG 1 GANG 5/8" PRESSED STEEL	ABOVE 32F & DRY 302 STAINLESS STEEL DECORA SILVER	SL1: SWITCH: SPST - LOW VOLTAGE | DEVICE GRADE: COMMERCIAL | DEVICE STYLE: PUSH BUTTON | FAR SIDE BOX SUPPORT: REQUIRED | NEMA ENCLOSURE: TYPE 1

GENERAL NOTES:
1. DEVICES BY MANUFACTURERS WHICH ARE NOT LISTED IN THE SCHEDULE REQUIRE 5-DAY WRITTEN PRIOR APPROVAL.
2. PROVIDE DEDICATED NEUTRALS FOR ALL DIMMER CIRCUITS.
3. CONFIRM SPECIFIED DIMMER IS PROPER FOR LAMP, BALLAST, DRIVER OR TRANSFORMER, AND LOAD PRIOR TO ORDERING DIMMER.
4. CONNECT GROUND WIRE TO DEVICE GROUNDING SCREW EVEN IF DEVICE IS LABELED SELF-GROUNDING.
5. FAR SIDE BOX SUPPORTS ARE NOT REQUIRED IN WOOD FRAMED BUILDINGS.

LC - PANELBOARD

RATINGS:
208/120 VOLTS 3 PHASE 4 WIRE
NEMA1 ENCLOSURE
200 AMP BUS

REQUIRED OPTIONS & ACCESSORIES:
COPPER BUS
SURFACE SINGLE TUB MOUNTING
SERIES RATED

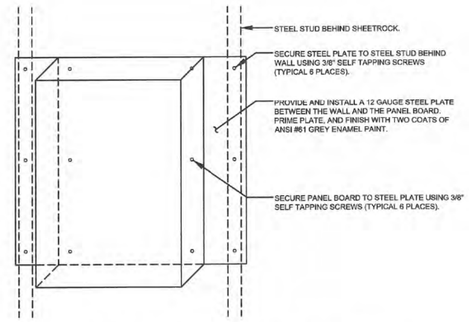
REQUIRED OPTIONS & ACCESSORIES:
GROUND BUS

LOAD TYPE AND CIRCUIT DESCRIPTION	#/VA	AMPS		AMPS	#/VA	LOAD TYPE AND CIRCUIT DESCRIPTION
EQUIPMENT: DO1 OPERATOR: OVERHEAD DOOR (3/4 HP)	1 1588	15		20	2 1250	EQUIPMENT: UH1 HEATING: ELECTRIC UNIT HEATER
EQUIPMENT: DO1 OPERATOR: OVERHEAD DOOR (3/4 HP)	3 1588	15			4 1250	EQUIPMENT: ---
EQUIPMENT: DO1 OPERATOR: OVERHEAD DOOR (3/4 HP)	5 1588	15		20	6 1250	EQUIPMENT: UH2 HEATING: ELECTRIC UNIT HEATER
EQUIPMENT: AF1 CEILING AIR FILTER	7 1588	20			8 1250	EQUIPMENT: ---
EQUIPMENT: AF2 CEILING AIR FILTER	9 1588	20		20	10 1200	~~SPARE: UNALLOCATED FUTURE~~ GEN. BATT CHARGER
EQUIPMENT: AF3 CEILING AIR FILTER	11 1588	20		20	12 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	13 1200	20		20	14 1200	~~SPARE: UNALLOCATED FUTURE~~ GEN. BLOCK HTR
SPARE: UNALLOCATED FUTURE	15 1200	20		20	16 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	17 1200	20		20	18 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	19 1200	20		20	20 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	21 1200	20		20	22 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	23 1200	20		20	24 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	25 1200	20		20	26 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	27 1200	20		20	28 1200	SPARE: UNALLOCATED FUTURE
SPARE: UNALLOCATED FUTURE	29 1200	20		20	30 1200	SPARE: UNALLOCATED FUTURE
SPACE: ---	31 0				32 0	SPACE: ---
SPACE: ---	33 0				34 0	SPACE: ---
SPACE: ---	35 0				36 0	SPACE: ---
SPACE: ---	37 0				38 0	SPACE: ---
SPACE: ---	39 0				40 0	SPACE: ---
SPACE: ---	41 0				42 0	SPACE: ---
SPACE: ---	43 0				44 0	SPACE: ---
SPACE: ---	45 0				46 0	SPACE: ---
SPACE: ---	47 0				48 0	SPACE: ---

LOADS BY TYPE (KVA)	CONNECTED	DEMAND
LIGHTING	0.0	0.0
RECEPTACLE	0.0	0.0
MOTOR - HEATING	0.0	0.0
MOTOR - COOLING	0.0	0.0
MOTOR - YR RND	4.8	4.8
ELECTRIC HEAT	5.0	5.0

	A	B	C	TOTAL
CONNECTED AMPS:	107.2	106.8	106.8	106.9
DEMAND AMPS:	71.7	66.3	66.3	68.1
CONNECTED KVA:	12.9	12.8	12.8	38.5
DEMAND KVA:	8.6	8.0	8.0	24.5
	A-B	B-C	C-A	
BALANCE % :	99.6	0.0	99.6	

LOAD BY TYPE (KVA)	CONNECTED	DEMAND
KITCHEN	0.0	0.0
PROCESS	0.0	0.0
MISCELLANEOUS	4.8	2.4
SPACE	0.0	0.0
SPARE	24.0	12.0
LARGEST MOTOR	1.6	0.4



SEISMIC SUPPORT OF PANELBOARDS
NO SCALE

CHAMBERLIN ARCHITECTS
ENHANCING EVERYDAY LIVING THROUGH DESIGN

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SCHEDULES

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443/140330 **E504**

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GENERAL EQUIPMENT SCHEDULE

EQUIPMENT		BRANCH CIRCUIT	OVERCURRENT	CONTROLLER	DISCONNECT @ CONTROLLER	DISCONNECT @ EQUIPMENT	CONTROL DEVICE	EQUIPMENT DESIGNATION & DESCRIPTION
DESIGNATION DESCRIPTION	RATINGS SUPPLIED BY INSTALLED BY WIRED BY	RACEWAY PHASE WIRE NEUTRAL WIRE GROUND WIRE	DEVICE RATING DEVICE TYPE DEVICE LOCATION	TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	TYPE ENCLOSURE SUPPLIED BY INSTALLED BY WIRED BY	
BC1 MISC: GENERATOR BATTERY CHARGER	120V 4.2A 1PH 2W EQUIP. MFGR EQUIP. MFGR ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 3R ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	BC1: MISC: GENERATOR BATTERY CHARGER
BH1 HEATING: GENERATOR BLOCK HEATER	208V 4.8A 1PH 2W EQUIP. MFGR EQUIP. MFGR ELECTRICAL SUB	0.50" EMT #12 COPPER NO NEUTRAL #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 3R ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	BH1: HEATING: GENERATOR BLOCK HEATER
CD1 MISC: GAS CLOTHER DRYER	120V 0.8A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	CD1: MISC: GAS CLOTHER DRYER
CM1 KITCHEN: DUAL COFFEE MAKER	120/208V 22.4A 1PH 4W OWNER OWNER ELECTRICAL SUB	0.50" EMT #10 COPPER #10 COPPER #10 COPPER	30 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	NR-IN PANEL --- --- --- ---	NONE REQUIRED --- --- --- ---	CM1: KITCHEN: DUAL COFFEE MAKER
CR1 SHOP: COMPRESSOR (3 HP)	208V 18.7A 1PH 2W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER NO NEUTRAL #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NR - CTRL & EQUIP --- --- --- ---	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	CR1: SHOP: COMPRESSOR (3 HP)
CR2 SHOP: MOBILE COMPRESSOR	208V 51.1A 3PH 3W MECH. SUB MECH. SUB ELECTRICAL SUB	1.00" EMT #6 COPPER NO NEUTRAL #10 COPPER	60 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NR - CTRL & EQUIP --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	CR2: SHOP: MOBILE COMPRESSOR PROVIDE TWO OUTLETS IN APPARATUS BAY ON A SINGLE CIRCUIRT - SEE PLANS.
CW1 MISC: CLOTHER WASHER	120V 9.4A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	15 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	CW1: MISC: CLOTHER WASHER
DL1 KITCHEN: GARBAGE DISPOSAL (3/4 HP)	120V 13.2A 1PH 2W PLUMBING SUB PLUMBING SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	DL1: KITCHEN: GARBAGE DISPOSAL (3/4 HP)
DO1 OPERATOR: OVERHEAD DOOR (3/4 HP)	120V 13.2A 1PH 2W GENERAL GENERAL ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	15 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	DOOR SWITCH NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	DO1: OPERATOR: OVERHEAD DOOR (3/4 HP) RECEIVE DOOR CONTROLS AND SAFETIES FROM GENERAL CONTRACTOR. MOUNT AND WIRE PER MANUFACTURER'S INSTALLATION DRAWINGS.
DW1 KITCHEN: DISH WASHER	120V 12.5A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	DW1: KITCHEN: DISH WASHER
EX1 MISC: EXTRACTOR	208V 17.0A 3PH 3W MECH. SUB MECH. SUB ELECTRICAL SUB	0.50" EMT #12 COPPER NO NEUTRAL #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NR - CTRL & EQUIP --- --- --- ---	NONFUSED SWITCH NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	EX1: MISC: EXTRACTOR
HD1 FIXED APPLIANCE: RANGE HOOD	120V 4.2A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	15 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	HD1: FIXED APPLIANCE: RANGE HOOD
IM1 MISC: ICE MAKER (3/4 HP)	120V 13.2A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	15 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	IM1: MISC: ICE MAKER (3/4 HP)
IP1 PUMP: IRRIGATION (1/2 HP)	120V 9.4A 1PH 2W GENERAL GENERAL ELECTRICAL SUB	0.75" PVC #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER DIST. PANEL	MAG CONTACTOR NEMA 3R EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED --- --- --- ---	NONFUSED SWITCH NEMA 3R ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	RAINBIRD CONTROLLER NEMA 3R GENERAL GENERAL ELECTRICAL SUB	IP1: PUMP: IRRIGATION (1/2 HP) COORDINATE LOCATION OF PUMP AND IRRIGATION CONTROLLER WITH LANDSCAPE SUBCONTRACTOR.
MW1 KITCHEN: MICROWAVE	120V 12.5A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	MW1: KITCHEN: MICROWAVE
PJ1 OFFICE: PROJECTOR	120V 4.4A 1PH 2W GENERAL GENERAL ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	REMOTE SWITCH NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	PJ1: OFFICE: PROJECTOR
PR1 MISC: PRINTER	120V 1.3A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	PR1: MISC: PRINTER
RA1 FIXED APPLIANCE: GAS RANGE	120V 5.8A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	15 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	RA1: FIXED APPLIANCE: GAS RANGE
RE1 KITCHEN: REFRIGERATOR	120V 9.4A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	RE1: KITCHEN: REFRIGERATOR
TV1 MISC: BIG SCREEN TV	120V 4.2A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	TV1: MISC: BIG SCREEN TV
UH1 HEATING: ELECTRIC UNIT HEATER	208V 12.0A 1PH 2W ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #N/R COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED --- --- --- ---	NONFUSED SWITCH NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	THERMOSTAT NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	UH1: HEATING: ELECTRIC UNIT HEATER BUNKER GEAR 133. PROVIDE BERKO #HUH524TA, #DS-30 DISCONNECT, AND REMOTE MOUNT THERMOSTAT.
UH2 HEATING: ELECTRIC UNIT HEATER	208V 12.0A 1PH 2W ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	0.50" EMT #12 COPPER #N/R COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	MAG CONTACTOR NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	NONE REQUIRED --- --- --- ---	NONFUSED SWITCH NEMA 1 EQUIP. MFGR EQUIP. MFGR EQUIP. MFGR	THERMOSTAT NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	UH2: HEATING: ELECTRIC UNIT HEATER BUNKER GEAR 133. PROVIDE BERKO #HUH524TA, #DS-30 DISCONNECT, AND REMOTE MOUNT THERMOSTAT.
UPS UNINTERRUPTABLE POWER SUPPLY	120V 25.0A 1PH 2W OWNER OWNER OWNER	0.50" EMT #10 COPPER #10 COPPER #10 COPPER	30 CIRCUIT BREAKER PANELBOARD	--- --- --- --- ---	--- --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	--- --- --- --- ---	UPS: UNINTERRUPTABLE POWER SUPPLY PROVIDE L5-30 TWISTLOCK RECEPTACLE. MOUNT ON 6'-0" SO CABLE FROM CEILING BOX.
WR1 SHOP: WELDER	240V 34.7A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.75" EMT #8 COPPER #N/R COPPER #10 COPPER	50 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	WR1: SHOP: WELDER
XR1 MISC: COPY MACHINE	120V 10.0A 1PH 2W OWNER OWNER ELECTRICAL SUB	0.50" EMT #12 COPPER #12 COPPER #12 COPPER	20 CIRCUIT BREAKER PANELBOARD	NONE REQUIRED --- --- --- ---	NONE REQUIRED --- --- --- ---	PLUG-IN NEMA 1 ELECTRICAL SUB ELECTRICAL SUB ELECTRICAL SUB	NONE REQUIRED --- --- --- ---	XR1: MISC: COPY MACHINE

GENERAL NOTES:
1. CONFRIM EQUIPMENT VOLTAGE, PHASES, OVERCURRENT DEVICE TYPE AND RATING WITH EQUIPMENT SUBMITTALS PRIOR TO ELECTRICAL ROUGH-IN.
2. RACEWAY MATERIAL SHOWN IS THE PRIMARY TYPE REQUIRED. SEE PLANS AND SPECIFICATIONS FOR OTHER RACEWAY TYPES WHICH MAY BE REQUIRED.

EM - LOADCENTER

Main = 1,3,5

RATINGS: 208/120 VOLTS 3 PHASE 4 WIRE, NEMA1 ENCLOSURE, 60 AMP BUS
REQUIRED OPTIONS & ACCESSORIES: COPPER BUS, SURFACE MOUNTING, SERIES RATED
REQUIRED OPTIONS & ACCESSORIES: GROUND BUS

60

LOAD TYPE AND CIRCUIT DESCRIPTION	#/VA	AMPS		AMPS	#/VA	LOAD TYPE AND CIRCUIT DESCRIPTION
LIGHTING: APPARATUS BAYS, LOBBY, HALL 104 & 112	1 A 992	20		20	2 720	MISCELLANEOUS: IT/AV - RACK
LIGHTING: BUILDING EGRESS	3 B 452	20		20	4 720	MISCELLANEOUS: IT/AV - MT
MISCELLANEOUS: FIRE ALARM PANEL	5 C 200	20		20	6 360	MISCELLANEOUS: IT/AV - RADIO
SPACE: UNALLOCATED FUTURE	7 A 0			20	8 1200	SPARE: UNALLOCATED FUTURE
SPACE: UNALLOCATED FUTURE	9 B 0			20	10 1200	SPARE: UNALLOCATED FUTURE
SPACE: UNALLOCATED FUTURE	11 C 0			20	12 0	SPACE: UNALLOCATED FUTURE
SPACE: ---	13 0				14 0	SPACE: ---
SPACE: ---	15 0				16 0	SPACE: ---
SPACE: ---	17 0				18 0	SPACE: ---

LOADS BY TYPE (KVA)	CONNECTED	DEMAND		A	B	C	TOTAL	LOAD BY TYPE (KVA)	CONNECTED	DEMAND
LIGHTING	1.4	1.8	CONNECTED AMPS:	24.2	19.8	4.7	16.2	KITCHEN	0.0	0.0
RECEPTACLE	0.0	0.0	DEMAND AMPS:	21.3	15.7	4.7	13.9	PROCESS	0.0	0.0
MOTOR - HEATING	0.0	0.0	CONNECTED KVA:	2.9	2.4	0.6	5.8	MISCELLANEOUS	2.0	2.0
MOTOR - COOLING	0.0	0.0	DEMAND KVA:	2.6	1.9	0.6	5.0	SPACE	0.0	0.0
MOTOR - YR RND	0.0	0.0						SPARE	2.4	1.2
ELECTRIC HEAT	0.0	0.0		A-B	B-C	C-A		LARGEST MOTOR	0.0	0.0
			BALANCE % :	81.5	23.6	19.2				

SB - LOADCENTER

MAIN = 1,3,5

RATINGS: 208/120 VOLTS 3 PHASE 4 WIRE, NEMA1 ENCLOSURE, 100 AMP BUS
REQUIRED OPTIONS & ACCESSORIES: COPPER BUS, SURFACE MOUNTING, SERIES RATED
REQUIRED OPTIONS & ACCESSORIES: GROUND BUS

100

LOAD TYPE AND CIRCUIT DESCRIPTION	#/VA	AMPS		AMPS	#/VA	LOAD TYPE AND CIRCUIT DESCRIPTION
EQUIPMENT: DO1 OPERATOR: OVERHEAD DOOR (3/4 HP) VIA TRANSFORMER	7 A 1588	15		20	2 615	LIGHTING: BUNKER GEAR, EMS STOR, IT/AV, ELEC, MECH & SCBA REPAIR
EQUIPMENT: DO1 OPERATOR: OVERHEAD DOOR (3/4 HP) VIA TRANSFORMER	9 B 1588	15		20	4 540	OUTLET: CAPTAIN OFC & MAIN OFFICE COMPUTERS ARC FAULT BREAKER
EQUIPMENT: DO1 OPERATOR: OVERHEAD DOOR (3/4 HP) VIA TRANSFORMER	11 C 1588	15		30	6 3000	EQUIPMENT: UPS UNINTERRUPTABLE POWER SUPPLY VIA TRANSFORMER
EQUIPMENT: FR1 HEATING: FURNACE (1 HP) VIA TRANSFORMER	13 A 1620	20		20	8 1716	EQUIPMENT: SS1A COOLING: SPLIT SYSTEM IT/AV 111
EQUIPMENT: FR2 HEATING: FURNACE (3/4 HP) VIA TRANSFORMER	15 B 1588	20			10 1716	EQUIPMENT: ---
EQUIPMENT: MW1 KITCHEN: MICROWAVE VIA TRANSFORMER - ARC FAULT BREAKER	17 C 1500	20		20	12 0	~~SPACE: UNALLOCATED FUTURE~~ LIGHTING: BUNKER GEAR
~~EQUIPMENT: RE1 KITCHEN: REFRIGERATOR VIA TRANSFORMER - GFIC BREAKER~~	19 A 1127	20		20	14 1200	~~SPARE: UNALLOCATED FUTURE~~ KITCHEN REFRIG
SPACE: ---	21 0				16 0	SPACE: ---
SPACE: ---	23 0				18 0	~~SPACE: ---~~ WH1 WATER HTR BC1 HAL DIKE PUMP

LOADS BY TYPE (KVA)	CONNECTED	DEMAND		A	B	C	TOTAL	LOAD BY TYPE (KVA)	CONNECTED	DEMAND
LIGHTING	0.6	0.8	CONNECTED AMPS:	65.5	45.2	50.7	53.8	KITCHEN	1.5	1.5
RECEPTACLE	0.5	0.5	DEMAND AMPS:	56.0	39.4	32.4	42.6	PROCESS	3.0	1.5
MOTOR - HEATING	3.2	3.2	CONNECTED KVA:	7.9	5.4	6.1	19.4	MISCELLANEOUS	4.8	2.4
MOTOR - COOLING	0.0	0.0	DEMAND KVA:	6.7	4.7	3.9	15.3	SPACE	0.0	0.0
MOTOR - YR RND	4.6	4.6						SPARE	1.2	0.6
ELECTRIC HEAT	0.3	0.0		A-B	B-C	C-A		LARGEST MOTOR	1.1	0.3
			BALANCE % :	69.1	88.2	77.4				

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ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SCHEDULES

NO:	ISSUED FOR:	DATE:

PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443/140330 **E505**

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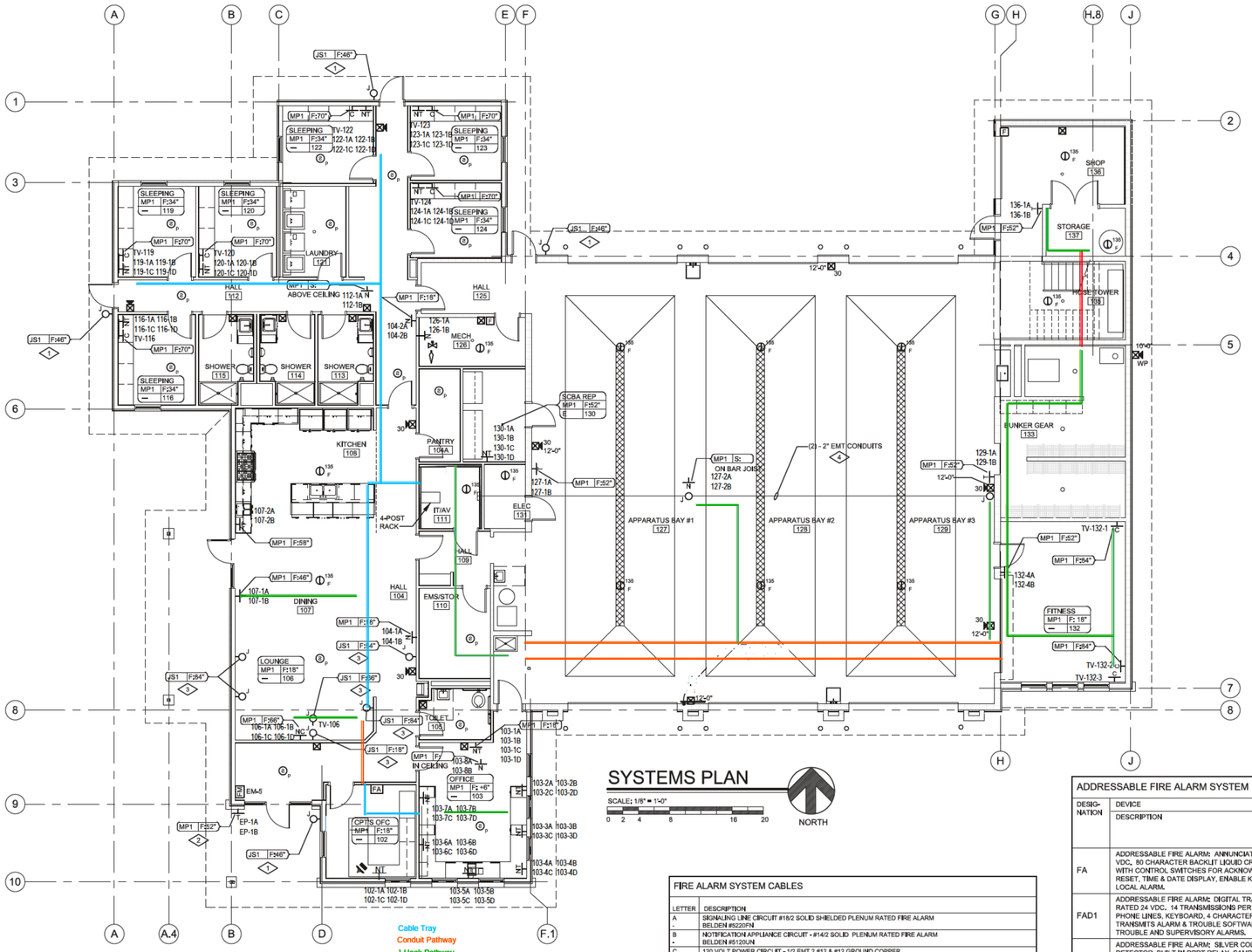
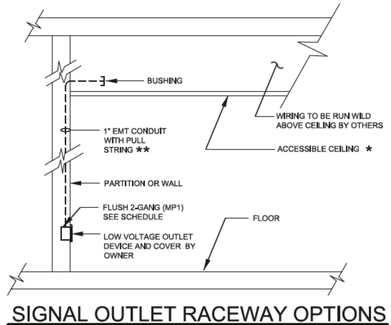


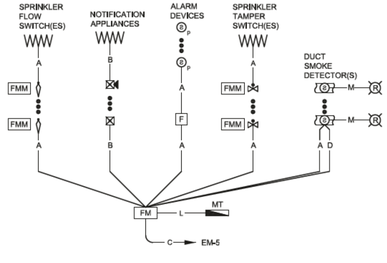


SIGNAL OUTLET RACEWAY OPTIONS

NO SCALE

* IN CASES WHERE CEILING IS NOT ACCESSIBLE, EXTEND CONDUITS TO THE SPACE ABOVE THE NEAREST ACCESSIBLE CEILING.

** PROVIDE 1-1/4" CONDUIT WHERE PLANS SHOW 4 OR MORE JACKS.



FIRE ALARM SYSTEM RISER

NO SCALE

FIRE ALARM SYSTEM CABLES

LETTER	DESCRIPTION
A -	SIGNALING LINE CIRCUIT #18/2 SOLID SHIELDED PLENUM RATED FIRE ALARM BELDEN #5220FH
B -	NOTIFICATION APPLIANCE CIRCUIT - #14/2 SOLID PLENUM RATED FIRE ALARM BELDEN #5120UN
C -	120 VOLT POWER CIRCUIT - 1/2 EMT 2 #12 & #12 GROUND COPPER SOUTHWIRE BUILDING WIRE
D -	24 VOLT POWER CABLE - #16/2 SOLID PLENUM RATED FIRE ALARM BELDEN #5220UN
H -	ANNUNCIATOR CABLE - 2 #16/2 SOLID SHIELDED AND 1 #16/2 SOLID UNSHIELDED PLENUM RATED FIRE ALARM TWO BELDEN #5220FN & ONE BELDEN #5220UN
L -	DIALER CIRCUIT - 4 PAIR CATEGORY 5 CABLE BELDEN #1624P
M -	REMOTE TEST CIRCUIT - 18/4 SOLID PLENUM RATED FIRE ALARM BELDEN #5320UN

FIRE ALARM SYSTEM SEQUENCE OF OPERATION

SYSTEM ACTIONS	SMOKE DETECTOR	HEAT DETECTOR	DUCT SMOKE DETECTOR	BEAM DETECTOR	PULL STATION	SPRINKLER FLOW SWITCH	SPRINKLER TAMPER SWITCH
ACTIVATES SYSTEM NOTIFICATION APPLIANCES	●	●		●	●		●
ACTIVATES SYSTEM SUPERVISORY ALARM						●	
DISPLAYS AT MAIN FIRE ALARM PANEL	●	●		●	●	●	
RELEASES MAGNETICALLY HELD DOORS	●	●		●			
SHUTS DOWN ASSOCIATED AIR-HANDLING UNIT			●				
CLOSES FIRE/SMOKE DAMPER	●		●	●			
ACTIVATES DIALER GENERAL ALARM SIGNAL	●	●		●			
ACTIVATES DIALER FLOW ALARM SIGNAL						●	
ACTIVATES DIALER SUPERVISORY SIGNAL							●
ACTIVATES EXTERIOR HORN/STROBE ABOVE FIRE DEPARTMENT CONNECTION	●	●			●		

GENERAL SYSTEMS NOTES:

1. LOW VOLTAGE SIGNAL WIRING MAY BE RUN OPEN ABOVE ACCESSIBLE SUSPENDED CEILINGS. ALL WIRING RUN OPEN IN ACCESSIBLE CEILING SPACES USED FOR AIR RETURN SHALL BE PLENUM RATED.
2. WIRING INSTALLED IN WALLS AND ABOVE INACCESSIBLE CEILINGS SHALL BE RUN IN CONDUIT.
3. REVIEW CASEWORK ELEVATIONS ON ARCHITECTURAL DRAWINGS AND CASEWORK SHOP DRAWINGS PRIOR TO INSTALLATION OF WIRING DEVICES. CALL ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER. WHERE DEVICES WOULD FALL BEHIND CASEWORK, RELOCATE DEVICES 2" CLEAR OF BACKSPLASH, OR COUNTER.
4. DEVICE MOUNTING HEIGHTS SHOWN ON THE PLANS TAKE PRECEDENCE OVER DEFAULT MOUNTING HEIGHTS SHOWN IN THE LEGEND.
5. ALL WIRING DEVICES ARE TO BE INSTALLED FLUSH UNLESS OTHERWISE INDICATED.
6. THE MOUNTING HEIGHT OF SIGNAL WIRING DEVICES IS DEFINED AS THE DISTANCE FROM THE FINISHED FLOOR TO THE CENTER OF THE DEVICE BOX.
7. PROVIDE FAR SIDE BOX SUPPORTS ON ALL BOXES MOUNTED TO STEEL STUDS. THE DEPTH OF THE MUD RINGS SHALL BE NO LESS THAN THE THICKNESS OF THE SHEETROCK.
8. THE FOLLOWING MAIN KEY DEFINES SIGNAL WIRING DEVICES IN THE ROOM LISTED. ALL DEVICES IN THIS SPACE ARE TO COMPLY WITH THIS MAIN KEY UNLESS OVERRIDDEN BY A DEVICE TAG.

   ROOM NAME — OFFICE
   SCHEDULED SIGNAL DEVICE — JS1 F:18"
   1000
   SIGNAL DEVICE MOUNTING SURFACE OF FLUSH; HEIGHT (MH OF +6" IS HEIGHT ABOVE COUNTER)
   ROOM NUMBER

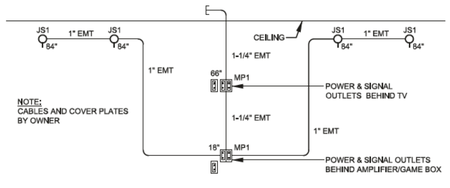
9. THE FOLLOWING DEVICE TAG DEFINE SIGNAL WIRING DEVICES WHICH ARE DIFFERENT FROM THOSE DEFINED IN THE MAIN KEY. THESE DEVICE TAGS OVERRIDE THE MAIN KEY ONLY FOR THE DEVICE OR DEVICES INDICATED.

   SCHEDULED SIGNAL DEVICE — JS1 F:18"
   SIGNAL DEVICE MOUNTING SURFACE OF FLUSH; HEIGHT (MH OF +6" IS HEIGHT ABOVE COUNTER)

10. SEE SPECIFICATIONS FOR ADDITIONAL CONSTRAINTS ON THE INSTALLATION OF SIGNAL WIRING DEVICE AND BOXES.

NOTES REFERENCED ON THE PLANS:

1. ROUGH-IN FOR DOOR ACCESS CONTROL CARD READER.
2. PROVIDE FLUSH SIGNAL BOX AND 1" EMT TO SPACE ABOVE THE LOBBY CEILING FOR OWNER'S TELEPHONE INTERCOM.
3. PROVIDE JUNCTION BOX AND EMPTY 1" CONDUIT WITH PULL STRINGS BETWEEN ALL JUNCTION BOXES FOR FUTURE SURROUND SOUND SYSTEM.
4. PROVIDE TWO 2" EMT CONDUITS FROM THE IT ROOM TO TWO 6"X12"X12" PULL BOXES ON THE UNDER SIDE OF THE ROOF TRUSSES IN BUNKER GEAR #133 FOR NETWORK, TELEPHONE AND ALARMING CABLES.



TV/SURROUND SOUND-LOUNGE 106

NO SCALE

ADDRESSABLE FIRE ALARM SYSTEM

DESIGNATION	DEVICE DESCRIPTION	MANUFACTURER CATALOG NUMBER ALTERNATE MANUFACTURERS	BOX DESCRIPTION	COVER DESCRIPTION
FA	ADDRESSABLE FIRE ALARM: ANNUNCIATOR, RATED 24 VDC., 80 CHARACTER BACKLIT LIQUID CRYSTOL DISPLAY WITH CONTROL SWITCHES FOR ACKNOWLEDGE, SILENCE AND RESET, TIME & DATE DISPLAY, ENABLE KEY SWITCH & LOCAL ALARM.	NOTIFIER LCD-80 — — —	9.9"H X 4.6"W X 2.5"D NOTIFIER #ABF-1B, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — — —
FAD1	ADDRESSABLE FIRE ALARM: DIGITAL TRANSMITTER, RATED 24 VDC. 14 TRANSMISSIONS PER HOUR, DUAL PHONE LINES, KEYBOARD, 4 CHARACTER LED DISPLAY, TRANSMITS ALARM & TROUBLE SOFTWARE ZONES, SYSTEM TROUBLE AND SUPERVISORY ALARMS.	NOTIFIER 411UDACT — — —	9.9"H X 4.6"W X 2.5"D NOTIFIER #ABF-5R, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — — —
FADU	ADDRESSABLE FIRE ALARM: SILVER COLOR, DUCT SMOKE DETECTOR, BUILT-IN DPDT RELAY, SAMPLE TUBE, PHOTOELECTRIC TYPE, RATED 24 VDC. PROVIDE SEPARATE REMOTE ALARM INDICATOR WITH TEST SWITCH.	NOTIFIER FSC-751RP & RTS-451 — —	NONE REQUIRED — — —	NONE REQUIRED — — —
FAH1	ADDRESSABLE FIRE ALARM: HORN/STROBE, RATED 24 VDC. CANDELA OUTPUT FIELD SELECTABLE AMONG 15, 15/75, 30, 75, AND 110, FIELD SELECTABLE HORN TONES, SYNCHRONIZABLE, AND RED COLOR.	NOTIFIER P1224MC — —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —
F	ADDRESSABLE FIRE ALARM: PULL STATION, RATED 24 VDC, DUAL ACTION WITH BI-COLOR ALARM STATUS LED, KEY RESET, AND BRAILLE TEXT ON HANDLE.	NOTIFIER NBG-12LX — —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —
FMM	ADDRESSABLE FIRE ALARM: MONITOR MODULE, RATED 24 VDC. MONITORS SPRINKLER FLOW AND TAMPER SWITCHES, GENERATING AN ALARM AT THE SET ADDRESS ON DEVICE CONTACT CLOSURE. 159 ADDRESSES AVAILABLE.	NOTIFIER FMM-101 — —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —
FM	ADDRESSABLE FIRE ALARM: MAIN PANEL, BATTERY BACKED, RATED 3A @ 120V. CAPABLE OF 301 TOTAL I/O POINTS, 99 INTELLIGENT DETECTORS, 99 ADDRESSABLE MODULES, 99 PROGRAMMABLE SOFTWARE ZONES AND 4 NAC CIRCUITS.	NOTIFIER AFP-200 — —	16"H X 14.5"W X 5.5"D, STEEL, WITH KNOCKOUTS, WALL SURFACE MOUNTING. — —	NONE REQUIRED — — —
FAS1	ADDRESSABLE FIRE ALARM: RED COLOR, STROBE, RATED 24 VDC, CANDELA OUTPUT FIELD SELECTABLE AMONG 15, 15/75, 30, 75, AND 110, FIELD SELECTABLE.	NOTIFIER S1224MC — —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —
FASP	ADDRESSABLE FIRE ALARM: SMOKE DETECTOR, RATED 24 VDC. LASER DEVICE, WITH 2 LED ALARM STATE INDICATORS, BUILT-IN MAGNETIC TEST SWITCH, HIGH SENSATIVITY.	NOTIFIER LPX751L + P710P BASE — —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —
FAT1	ADDRESSABLE FIRE ALARM: RED COLOR, HEAT DETECTOR, RATED 24 VDC. 135 DEGREE F FIXED TEMPERATURE/RATE OF RISE.	NOTIFIER FST-851R B710LPBP BASE —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —
FAT2	ADDRESSABLE FIRE ALARM: RED COLOR, HEAT DETECTOR, RATED 24 VDC. 200 DEGREE F FIXED TEMPERATURE/RATE OF RISE.	NOTIFIER FST-851H B710LPBP BASE —	4" SQ X 2 1/8" DEEP, STEEL, WITH KNOCKOUTS, WALL FLUSH MOUNTING. — —	NONE REQUIRED — — —

NOTES:
DEVICES BY MANUFACTURERS WHICH ARE NOT LISTED IN THE SCHEDULE REQUIRE 5-DAY WRITTEN PRIOR APPROVAL.

CHAMBERLIN ARCHITECTS
ENHANCING EVERYDAY LIVING THROUGH DESIGN

CHAMBERLIN ARCHITECTS
437 Main St.
Grand Junction, Colorado 81501
T 970.242.6804

725 Saint Joseph St., Suite B1
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T 605.355.6804

www.chamberlinarchitects.com

GVES
GRAND VALLEY ENGINEERING SOLUTIONS
ELECTRICAL CONSULTING ENGINEERS
2961 CIRCLING HAWK COURT GRAND JUNCTION, CO 81503
(970) 256-0353 FAX (970) 245-6319

ROCKY MOUNTAIN TELECOM & DATA, INC.
GOLDEN • GRAND JUNCTION
COLORADO

ORCHARD MESA FIRE STATION #4

GRAND JUNCTION, COLORADO

SYSTEMS PLAN

NO:	ISSUED FOR:	DATE:
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PROJECT STATUS: 100% CD

DRAWN BY: KLT CHECKED BY: WLM

DATE: 04/10/2015 SHEET NO:

PROJECT NO: 1443/140330 **E401**

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Construction Manager/General Contractor (CM/GC) Services
City of Grand Junction Fire Station No.6
RFP Response

FCI Constructors, Inc.

To:
Duane Hoff Jr.
Senior Buyer, Purchasing Division
City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501
Phone: (970) 244-1545

By:
Ed Forsman, President
FCI Constructors, Inc.
3070 I-70B, Bldg. A
Grand Junction, CO 81504
eforsman@fciol.com
970-434-9093

Due: October 17, 2019, 3:30PM MDT

SECTION 7.0: SOLICITATION RESPONSE FORM

Bid Date: 10/17/19

Project: RFP-4703-19-DH "City of Grand Junction Fire Station #6 CM/GC"

Bidding Company: FCI Constructors Inc

Name of Authorized Agent: Ed Forsman

Email eforsman@fciol.com

Telephone 970-434-9093 **Address** 3070 I-70B, Bldg A

City Grand Junction **State** CO **Zip** 81504

The undersigned Bidder, in compliance with the Request for Proposals, having examined the Instruction to Bidders, General Contract Conditions, Statement of Work, Specifications, and any and all Addenda thereto, having investigated the location of, and conditions affecting the proposed work, hereby proposes to furnish all labor, materials and supplies, and to perform all work for the Project in accordance with Contract Documents, within the time set forth and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Solicitation Response Form is a part.

The undersigned Contractor does hereby declare and stipulate that this offer is made in good faith without collusion or connection to any person(s) providing an offer for the same work, and that it is made in pursuance of, and subject to, all terms and conditions of Solicitation Documents, all of which have been examined by the undersigned.

The Contractor also agrees that if awarded the Contract, to provide insurance certificates within ten (10) working days of the date of Notification of Award. Submittal of this offer will be taken by the Owner as a binding covenant that the Contractor will be prepared to complete the project in its entirety.

The Owner reserves the right to make the award on the basis of the offer deemed most favorable, to waive any formalities or technicalities and to reject any or all offers. It is further agreed that this offer may not be withdrawn for a period of sixty (60) calendar days after closing time. Submission of clarifications and revised offers automatically establish a new thirty day (30) period.

Prices in the proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a proposal for the purpose of restricting competition.
- The individual signing this proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by the City of Grand Junction are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-903544. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the quoted prices.
- City of Grand Junction payment terms shall be Net 30 days.
- Prompt payment discount of 0 percent of the net dollar will be offered to the Owner if the invoice is paid within 0 days after the receipt of the invoice.

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Scope of Services, and other Contract Documents.

State number of Addenda received: 1.

It is the responsibility of the Offeror to ensure all Addenda have been received and acknowledged.

By signing below, the Undersigned agree to comply with all terms and conditions contained herein.

Company: FCI Constructors Inc

Authorized Signature: Ed Forsman

Title: President

Cover Letter

October 16, 2019

City of Grand Junction
Attn: Duane Hoff Jr.,
Senior Buyer, Purchasing Division
250 N. 5th Street
Grand Junction, CO 81501

RE: City of Grand Junction
Fire Station No.6

Dear Mr. Hoff,

FCI is proud to submit the enclosed proposal for the CM/GC services of Fire Station #6. We value our relationship with the City of Grand Junction and our success working together on Fire Station #4 and Two Rivers Convention Center. We are excited at the opportunity to be a part of this Team as we understand the vital need that an additional station will provide in North Grand Junction.

We have selected the team of Brian Young, Project Manager, Craig Reid, Superintendent and Evan Walton, Pre-Construction Manager due to their recent experience completing public safety facilities and working relationship with the City of Grand Junction. Brian recently completed both the Aspen Ambulance Facility and Sheriff/Administration Building for Pitkin County as well as the Avalon Theatre Addition and Renovation in 2014. Craig Reid recently completed the Snowmass Wildcat Fire Station No. 1 as well as the Grand Junction Fire Station # 4 in 2016. Evan Walton completed the pre-construction services for Fire Station #4 as well as the Renovation at Two Rivers Convention Center. We are confident that this team will once again deliver our community a project of the highest quality within budget and on schedule.

In the last two decades, FCI has completed $192,570,736 of fire station construction projects, ten of them located on the Western Slope. Our company's experience will provide valuable insight in the design phase to address unique characteristics of fire stations, such as specialized fire fighting equipment, vehicle maintenance requirements, and in house training facilities. We also look to draw upon our past experience with Station #4 to expedite the project and get under construction as soon as possible.

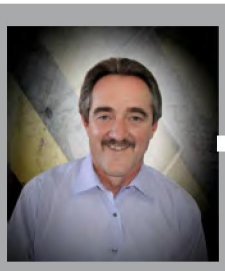
When FCI was founded it was with the philosophy that we would be a client focused organization. We are firmly committed to making your vision a reality and to stay focused on that at all times. Our company is employee owned and as such each proposed team member has a vested interest in making sure your project is successful and your expectations are met if not exceeded. We hope you find the following pages helpful and informative as we look forward to the possibility of being on your TEAM!

Thank you for the opportunity.

Ed Forsman
President
FCI Constructors, Inc.
eforsman@fciol.com
3070 I-70 B, Bldg A, Grand Junction, CO 81504
970-434-9093

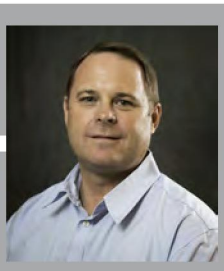
QUALIFICATIONS / EXPERIENCE / CREDENTIALS

Organizational chart of company and/or project team.



Ed Forsman
President

Brad Keller
Vice President of Grand Junction Operations



Michael Saks
Corporate Safety Officer

Evan Walton, LEED® AP
Pre-Construction Manager

Brian Young
Project Manager

Brian is your primary contact during the pre-construction, construction and warranty phases of the project. All information will be processed through him, which provides a consistent, single point of contact and responsibility from start to finish.

Craig Reid
Superintendent

Identification of Key Personnel

Professional qualifications, resumes and functions of personnel who will be assigned to the project. Specific related project experience of key personnel. Personnel availability and time commitment proposed to meet the project schedule.

Brian Young, Project Manager

We selected Brian Young as the Project Manager for the City of Grand Junction Fire Station #6 because of his successful working relationships with municipalities managing the construction of public safety faculties. Brian understands the expectations of the City and will deliver a project that exceeds the City's expectations. Brian recently completed both the Aspen Ambulance Facility and the Sheriff's and Administrative Building for Pitkin County and also has a successful relationship with the City of Grand Junction, completing the Avalon Theatre Addition and Renovation in 2015.

As the Project Manager, Brian will be the City's primary contact during all phases of the project. All information will be processed through him, which provides a consistent, single point of contact from start to finish, eliminating the learning curve at the point of turnover from pre-construction to construction operations. He will coordinate and schedule weekly meetings as necessary during pre-construction and construction phases to make certain that all involved Team Members are informed as to what decisions need to be made in the time frames necessary to keep the project on track for success.

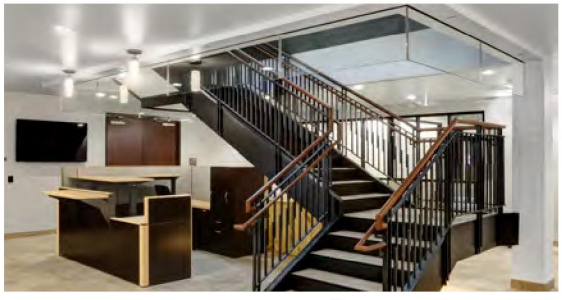
Project management is much more than controlling costs, completing a project on-time, setting quality standards and insuring that we provide a safe job-site. It's the process of how our team approaches the project that sets us apart from our competition. Long before we discuss schedule, costs and / or quality, it's important that we understand the client's vision and goals to create a team that is built on integrity, experience and trust. Through effective communication with the team, we'll have a clear and precise understanding of the client's expectations which will allow us to move forward successfully.

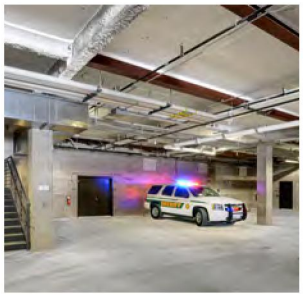
Being the primary contact during the project allows Brian the opportunity to implement the project execution plan developed during pre-construction. During construction his primary responsibility is to ensure project success in the areas of schedule, budget, quality, safety and client satisfaction.

Pitkin County Ambulance Facility - Aspen, CO

Avalon Theatre - Grand Junction, CO

VA Hospital Parking Structure- Grand Junction, CO





Pitkin County Sheriff's Station & Administration Building Aspen, CO

Craig Reid, Superintendent

Craig began his construction career forty-five years ago, joining the FCI team in 1997 as a Superintendent. Craig has proven himself to be able to take on complex projects and fast track construction schedules without a hitch, especially during his recent success on the Orchard Mesa Fire Station No. 4 project, during which he oversaw the construction of a new public facility, coordinating multiple subcontractors with overlapping schedules while maintaining the fast-track schedule. His relationships with our subcontractors and suppliers are quite remarkable, as he builds mutually respectful partnerships, allowing expectations to be understood from the start of the project

There are several valuable tools that Craig utilizes that enhance both the construction process and the community experience. He will work with neighbors, building officials, the City, and surrounding community representatives to receive their input, as well as to be able to relay information about construction activities, address questions or concerns, provide information about milestone activities, closures, traffic pattern revisions, etc. The best ways Craig can achieve this is through maintaining an open line of communication utilizing a combination of hands-on meetings, tours, invitations to milestone construction events, and construction schedule / progress report postings.

Craig and his team will start working early on to develop approaches to public safety, pedestrian and vehicle traffic control, noise control, and communications using the input of these representatives, as well as input that might come from other sources. Keeping the community informed about the City of Grand Junction Fire Station #6 project will be a positive situation for the entire design and construction team, as well as all contributing stakeholders and contractors.

Why we chose Craig Reid, as your Superintendent:

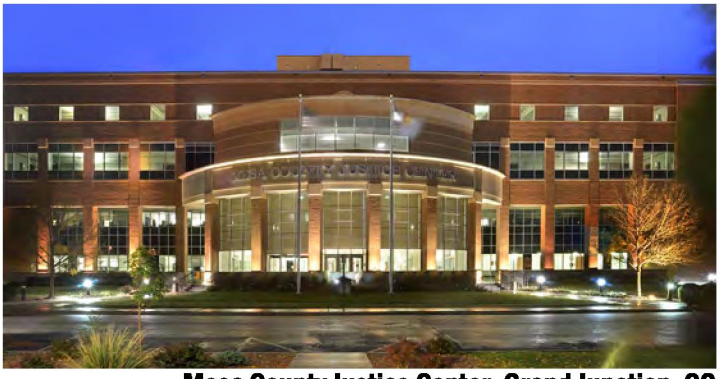
- His past success delivering the Orchard Mesa Fire Station No. 4. Craig provides a unique understanding of the City's objectives and obligations to various project stakeholders.
- Recent completion of the Snowmass Wildcat Fire Protection District Station No. 71.
- Strong leadership and mutually respectful relationships with crews.
- Proactive on-site communication and coordination.
- Past project experience simultaneously coordinating multiple crews, phases, and sites while maximizing each subcontractors contributions, quality, and schedule impact.
- Always seeking to improve despite over 45 years of successful construction experience.
- Professional, accommodating, and steadfast public relations and stakeholder liaison.
- Unparalleled commitment to client service and satisfaction.
- A multitude of Municipal clients' project history.

Availability & Time Commitment:

Craig is currently working on the HopeWest renovation project. He is currently not scheduled to manage another future project and will be available to the City of Grand Junction from the start of pre-construction through project closeout.

Snowmass Wildcat Fire Station No. 71- Snowmass Village, CO

Orchard Mesa Fire Station No.4- Grand Junction, CO



Mesa County Justice Center- Grand Junction, CO

Brad Keller
Vice President of Grand Junction Operations

IN INDUSTRY SINCE: 1998
WITH FCI SINCE: 2000

FCI Constructors, Inc.

EDUCATION
B.S. in Construction Science and Management
Colorado State University

Brad is responsible for construction operations in Grand Junction. He will continually monitor the project, as well as make periodic site visits to ensure FCI and subcontractor resources are properly allocated. Brad will provide support to Brian Young and his team as necessary to ensure Owner satisfaction and project success.

REPRESENTATIVE PROJECTS

- Rio Blanco County Justice Center - Meeker, CO
- Eagle County Justice Center - Eagle, CO
- Eagle County Courthouse Renovation - Meeker, CO
- Colorado Bureau of Investigation (CBI) facility - Grand Junction, CO
- Grand River Hospital TI & OR Expansion
- Grand River Hospital Clinic West -Battlement Mesa, CO
- Grand River Hospital District Remodel Projects (6) - Hand Therapy, Bone Density Renovation, Lounge Renovation, Dene Moor Nursing Home Hot Tub Remodel, ER & OR Remodel - Rifle, CO
- Family Health West Replacement Hospital - Fruita, CO
- St. Mary's Hospital Cath Lab Remodel- Grand Junction, CO
- Hospice of Western Colorado In-Patient Care Facility - Grand Junction, CO
- Hilltop Secured Assisted Living - Grand Junction, CO
- Other Relevant Projects (Size & Scope):
- Colorado Mesa University Tomlinson Library - Grand Junction, CO
- Town of Avon I-70 Regional Transportation Facility - Avon, CO
- Mesa County Consolidated Services Building - Grand Junction, CO
- Colorado Mesa University Houston Hall Renovation - Grand Junction, CO
- Fruita Community Center & Mesa County Library
- Halliburton Energy Services Minot Field Camp- Minot, ND
- The Cottages at The Commons- Grand Junction, CO
- Hilltop Corporate Office - Grand Junction, CO
- Halliburton Energy Services Dickinson Field Camp- Dickinson, ND
- Colorado Mesa University Academic Classroom Building - Grand Junction, CO
- East Middle School Renovation - Grand Junction, CO
- Grand Junction High School Additions / Renovation - Grand Junction, CO
- Bookcliff Middle School - Grand Junction, CO
- Kathryn Senor Elementary School - Rifle, CO
- Grand Valley High School - Parachute, CO
- DeBeque Middle / Senior High School - DeBeque, CO
- Palisade Civic Center Gym Renovation - Palisade, CO
- Rangely Recreation Center - Rangely, CO

REFERENCES

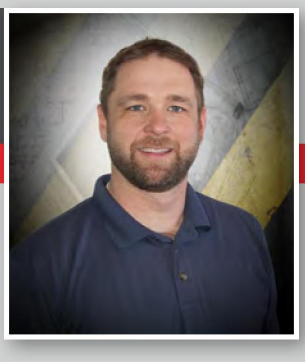
Connie Wilmot
Grand River Hospital District
(970) 625-6458

Mark Francis, CEO
Family Health West Hospital,
970-858-2107

Bob Johnson, AIA
Riley Johnson Architecture
(303) 832-9111

Brian Young
Project Manager

INDUSTRY SINCE: 2002
WITH FCI SINCE: 2008



FCI Constructors, Inc.

EDUCATION
B.S. Construction Management
Arizona State University

OSHA 40-Hour Training

REFERENCES
Gabe Muething
District Director
Aspen Ambulance District
(970) 544-1580

Trent Prall
Engineering Manager,
City of Grand Junction
(970) 244-1554

Ron Ryan
Undersheriff
Pitkin County
(970) 920-5300

Rich Englehart
Chief Operating Officer
Pitkin County
(970) 429-6135

Daniel Gartner, AIA
Chamberlin Architects
Phone: (970) 242-6804

We selected Brian as the Project Manager for the City of Grand Junction Fire Station No. 6 because of his recent experience managing both the Pitkin County Aspen Ambulance Facility and the Pitkin County Sheriff's Station and Administration Building in Downtown Aspen. Brian has a successful working relationship with managing projects for the City of Grand Junction, completing both the Avalon Theatre Addition and Renovation in 2015.

Brian excels in the management of high profile, fast-track projects such as the Avalon Theatre Renovation in Grand Junction, CO and the Pitkin County Sheriffs Station located downtown Aspen. With both projects, Brian was instrumental in orchestrating great public relations for both community members and Owners on all of his project. His expertise is in his ability to collaborate with his clients, design partners, subcontractors and community stakeholders. Brian takes pride in keeping the Client informed of progress and answering questions related to the project.

REPRESENTATIVE PROJECTS

- **Pitkin County Aspen Ambulance Facility - Aspen, CO [$7,251,539]**
- **Pitkin County Sheriff's Station & Administration Building - Aspen, CO [$18,308,657]**
- Pitkin County Courthouse Renovation - Aspen, CO [$311,188]
- Pitkin County Jail Basement Renovation -Aspen, CO [$274,065]
- Sacred Heart Church - Fruita, CO [$2,548,170]
- VA Hospital Parking Garage - Grand Junction, CO [$6,709,311]
- **Avalon Theatre Renovation & Addition - Grand Junction, CO [$8,027,948]**
- 9th & Cooper Parking Garage - Glenwood Springs, CO [$3,658,545]
- 8th & Cooper Multi-Use Building- Glenwood Springs, CO [$8,664,281]
- Tsaile Public School Addition / Remodel - Tsaile, AZ [$6,102,859]
- Many Farms New Gym - Chinle, AZ [$3,793,672]
- MB Construction Heavy Equipment Shop - DeBeque, CO [$1,010,969]
- Ute Water Headquarters & Subdivision – Grand Junction, CO [$5,292,202].
- Eagle Valley High School Addition/Renovation – Gypsum, CO [$25,100,345]

Craig Reid
Project Superintendent

IN CONSTRUCTION SINCE: 1974
WITH FCI SINCE: 1997

FCI Constructors, Inc.

EDUCATION

Lane County Community College - Eurgene, OR
Construction Estimating - Clark County Community College- Las Vegas, NV
OSHA 10-Hour

REFERENCES

Norma West
Senior Director of Finance
HopeWest
970-773-3886

City of Grand Junction Fire
Ken Watkins, Fire Chief
(970) 549-5800

Scott Thompson
Fire Chief
Snowmass Wildcat Fire Protection District
(970) 923-2212

Craig started at FCI Constructors 22 years ago and has managed some of FCI's most challenging construction projects. His project portfolio is very diverse. Craig has a strong background in municipal construction experience completing projects such as managing the Orchard Mesa Fire Station No. 4, Snowmass Wildcat Fire Station No. 71, Colorado Army National Readiness Center, Glenwood Springs Municipal Operations Center and the Mesa County Justice Center. His experience and knowledge will be invaluable to any project Craig manages.

As Superintendent, Craig is responsible for the physical construction of this project, including general coordination, planning and scheduling of subcontractors and FCI crews. It is his responsibility to relay news about construction activities, address questions or concerns, distribute information about milestones, closures, service disruptions, and traffic patterns. He is also accountable for job site safety and quality control.

REPRESENTATIVE PROJECTS

- **Snowmass Wildcat Fire Protection District Station No. 71 - Snowmass Village, CO [$15,093,740]**
- **Orchard Mesa Fire Station No. 4 - Grand Junction, CO** [$2,508,877]
- **Grand Junction Fleet Service Bret Maintenance Facility- Grand Junction, CO [$1,169,505]**
- **Avalon Theater Stage Renovation – Grand Junction, CO [$258,350]**
- **Mesa County Justice Center – Grand Junction, CO [$16,774,531]**
- Family Health West WomenCare - Fruita, CO [$1,715,490]
- Primary Care Partners - Kokopelli Renovation- Fruita, CO [$171,199]
- Gateway Canyons Employee Housing - Gateway, CO [$7,786,025]
- Gateway Canyons Resort Pool & Spa- Gateway, CO [$11,177,222]
- Gateway Canyons Car Storage- Gateway, CO
- Gateway Canyons Spa Renovation- Gateway, CO [$1,386,694]
- Colorado Army National Readiness Center - Grand Junction, CO [$10,932,768]
- St. Mary's Hospital Century Project - Grand Junction, CO [$193,440,823]
- Eagle Valley High School Addition/Renovation – Gypsum, CO [$25,100,345]
- Bacon Community Building – Grand Junction, CO [$5,214,440]
- St. Mary's Hospital Cath Lab – Grand Junction, CO [$557,290]
- Grand Junction High School Renovation/Additions – Grand Junction, CO [$5,307,175]
- East Middle School Renovation – Grand Junction, CO [$2,991,574]
- Yampa Ranger Station – Yampa, CO [$1,397,814]
- Colorado West Women's Care – Grand Junction, CO [$805,064]
- Holy Family Catholic School – Grand Junction, CO [$5,380,757]
- Glenwood Springs Municipal Operations Center – Glenwood Springs, CO [$5,627,267]

Evan Walton, LEED AP
Pre-Construction Manager

IN INDUSTRY SINCE: 2002
WITH FCI SINCE: 2003

FCI Constructors, Inc.

EDUCATION

B.S. Construction
Science & Management
Kansas State University

LEED® Accredited
Professional

REFERENCES

Phil Onofrio
Chief Operations Officer
Mesa County Valley
School District 51
(970) 245-8182

Peter Icenogle, AIA
Blythe Group + co
970-778-3439

Jay Valentine
Assistant Financial Operations
Manager
City of Grand Junction
(970) 244-1517

Stephanie Grose, AIA
TreanorHL
(303) 298-4719

As pre-construction manager, Evan will manage the pre-construction services and estimates for the City of Grand Junction Fire Station No. 6 project. His primary responsibility will be to coordinate a procurement strategy that meets your project goals. Evan will oversee the quantity take-offs, pricing, bid analysis, value engineering and research performed by FCI's estimating staff to ensure accurate estimates throughout the pre-construction process.

REPRESENTATIVE PROJECTS

- **Two Rivers Convention Center Renovation - Grand Junction, CO [$6,275,448]**
- **City of Grand Junction Orchard Mesa Fire Station No. 4 - Grand Junction, CO [$2,508,877]**
- **Pitkin County Aspen Ambulance Facility - Aspen, CO [$18,308,657]**
- Karis Apartments - Grand Junction, CO [$5,400,000]
- Colorado Canyons Hospital Addition - Fruita, CO [$7,072,222]
- Summit County School District Middle School Addition and Renovation, Frisco, CO [$16,447,471]
- Adaptive Sports Center Kelsey Wright Building - Crested Butte, CO [$9,973,863]
- Colorado State University Western Campus - Grand Junction, CO [$9,444,749]
- Summit County School District High School Addition & Renovation - Breckenridge, CO [$23,386,362]
- Montrose School District RE-1J New Columbine Middle School - Montrose, CO [$25,784,976]
- Missouri Ridge Middle School - Williston, ND [$19,693,426]
- Glenwood Springs Elementary Addition/Renovation - Glenwood Springs, CO [$25,203,052]
- Glenwood Springs Middle School Renovation - Glenwood Springs, CO [$5,543,048]
- Carbondale Middle School Renovation - Carbondale, CO [$7,601,144]
- Garfield County School District 16 Bond Improvements - Parachute, CO [$29,920,224]
- Two Rivers Community School Addition/Renovation - Glenwood Springs, CO [$5,793,566]
- Roaring Fork School District-Phase 1 Improvements - Carbondale, Basalt, Glenwood, CO [$3,188,003]
- Roaring Fork School District Phase 3 Improvements - Carbondale & Basalt, CO [$13,217,946]
- Mesa County Valley School District New R5 Alternative High School-Grand Junction, CO [$7,625,074]

Michael Saks
Corporate Safety Director

IN INDUSTRY SINCE: 2001
WITH FCI SINCE: 2013

FCI Constructors, Inc.

EDUCATION

Industrial Hygiene Management Certificate, Columbia Southern University

Certified Construction Health & Safety Technician
Board of Certified Safety Professionals

Michael brings over 18 years construction management experience in occupational environmental, safety, health and quality control fields. He has proven success in the development and implementation of environmental, safety, health and quality control policies and procedures as well as proven ability to successfully implement positive change resulting in decreased accidents and injuries and increased project controls efficiency. He possesses a "life-long-learner" attitude and continually seeks to further education and certifications. Michael also has extensive experience working with the U.S. Army Corps of Engineers and NAVFAC in the Pacific region.

TRAINING AND CERTIFICATIONS

40hr. Construction Safety Hazard Awareness Training for Contractors

Construction Health and Safety Technician (CHST)

40 hr. HAZWOPER

OSHA 30 hour Course Certification

ACR Standard First Aid

ACR Adult CPR

NAVFAC Construction Safety & Health Certification Course, Level I

NAVFAC Construction Safety & Health Certification Course, Level II

KRS RF Safety Training Course

Mold Training for Contractors #2151369

Personal Protective Equipment

Hazardous Energy; Lock-out/ Tag-out

Safway Sectional Scaffold Erector/Inspector

Forklift Train the Trainer

Lead Abatement Train the Trainer

Aerial/Man-lift

Fall Protection

Cranes

Excavation/Trenching

US Army Corps of Engineers Quality Control Management

Estimating and Bidding Course Certificate, Association for the Advancement of Cost Engineering (AACE)

Planning and Scheduling Course Certificate, AACE

ACI Concrete Transportation Construction Inspector

ACI Grade 1 Concrete Field Testing Certification #049738

ACI Concrete Strength Testing Technician

ACI Concrete Laboratory Testing Technician- Grade I

Precast/Prestressed Concrete Institute (PCI) Quality Control Personnel Certification Technician Level I

ICBO Reinforced Concrete Special Inspector #5206065-49

ICBO Structural Masonry Special Inspector #5206065-84

ICBO Spray Applied Fire Proofing Inspector #5209065-86

The Post-Tension Institute, Level 1 Field Fundamentals Inspector #21504597

NICET Level I in Geotechnical Engineering Technology, Construction #114351

NICET Level I in Geotechnical Engineering Technology, Laboratory #114351

Safety is our #1 Priority...0.65
2019 Experience Modification Rate

Strategy and Implementation Plan

Describe your proposed CM/GC management strategy and/or plan for achieving the objectives in the RFP. Provide examples of control systems you propose to use in the execution of this project.

Construction Management

The majority of our projects are for public clients because having the ability to be a part of project endeavors like law enforcement facilities, fire stations, training academies, court houses and municipal offices holds a special significance. These are projects that are not just the piecing together of physical structures, but the construction of spaces, and places that allow public safety personnel to create safer communities. Each client being unique in what their particular vision is for their project. Being able to assist our clients in the realization of their visions, and making them a reality, is what has enabled FCI to become an expert in the construction of our projects, and it is what continues to set us apart from our competition.

In the past five years approximately 85% of our projects were CM/GC projects where we provided pre-construction services. Experience has shown us that the most important service we provide is guidance at every stage of the project, from design through successful completion. Therefore, our approach to CM/GC work is based on a proven philosophy wherein the Owner, Design Team and FCI work together as a cohesive team.

We have become very familiar with the necessities of working within municipal facilities and the expectations of our clients and the community they serve, resulting from our experiences in successfully completing over $315 million municipal facilities company-wide, in the past five years alone.

Our approach to the Grand Junction Fire Station No. 6 will be very similar to those we've employed on previous municipal, CM/GC projects. We intend to draw upon our previous project successes and practices to attain the desired result of completing your project in an economical manner while maintaining the highest level of quality and service.

FCI will work closely with members of the City of Grand Junction Fire Department and the Design Team to ensure that the best interests of the City are kept at the forefront and we will provide guidance at every stage of the project, from design through successful completion. We understand that command of technical issues alone does not assure successful project execution, and that we must also have a command of the non-technical and people issues. With that in mind, we begin every project with the goal of positioning all Team members to be successful. We identify early on in the design phase:

- Roles and responsibilities of each Team member.
- Goals and expectations of each Team member.
- All project stakeholders.
- Lines of reporting and communication.
- Critical project-related issues.

Collaboration & Communication

Our team proposes to be a valuable resource by utilizing the team approach during the design phase. Our Project Manager engages in the project at the beginning of design phase and is the FCI main point of contact all the way through close out of the project. Our Superintendent also becomes an important piece of the pre-construction planning, pricing, and resource allocation process. At the beginning of design phase, both Brian Young and Craig Reid will be available to provide valuable input in areas of their expertise relating design, planning and construction.

Our Pre-Construction Manager, Evan Walton, will be responsible for management of the FCI pre-construction team and will be providing the pre-construction phase services. Evan will oversee and lead the efforts for each phase of pre-construction, subcontractor solicitation and scope review. He will oversee the assembly of each milestone estimate. He will provide cost input for building systems and material selections to the design team throughout the design phase. The Pre-Construction Team will provide a support role for Evan in any auxiliary actions that need to take place for maximum information availability during design. For example, he will attend design meetings when appropriate, assist with subcontractor solicitation and scope review and assembly of each milestone estimate. They will assist in product research, quantity takeoff and cost input for building systems and material selections to the design team throughout the design phase.

Our team will facilitate a seamless transition from pre-construction to construction by team members closely working together and putting the plan in place. We fully understand that good communication with the entire project team are essential to the success of a project.

Our Pre-Construction Manager, Evan, will have a turnover meeting with the Project Manager, Brian, to compare information and maximize project success. To guarantee that the information and understanding rendered during pre-construction meetings is present during construction, we will schedule weekly meetings with field staff. Our field staff can readily access Prolog Manager, our web-based project management system to capture and manage project information from the field to the office.

Pre-construction Approach

FCI's proven approach to controlling cost, schedule and quality starts from day one of the design/pre-construction phase of the project.

Upon selection as CM/GC, our participation in the design process begins. From initial design meetings through preparation of the Guaranteed Maximum Price (GMP), our pre-construction team will work with the City of Grand Junction and the Design Team to arrive at a plan for reaching the goals of the project in terms of design, schedule, and budget.

We will develop a baseline budget estimate based upon the current documents, building comparisons in pricing between alternative materials or systems, as necessary. Our budget and schedule will be reviewed and revised at progressive stages to update previous information and to incorporate any value engineering elements accepted by the City. The GMP will be prepared per the direction of the City, and will be validated by vendor and subcontractor pricing to the greatest extent possible. The baseline budget will be reviewed by the Project Team so that everyone understands the format and basis of the estimate, and at this point will become the benchmark against which all cost-driven decisions will be measured.

We have prepared a project schedule, with both pre-construction/design phase and construction phase milestones and activities, including the coordination of moving operations around within the existing building. This scheduled once reviewed and approved by the City, will become the benchmark against which all ensuing schedule-driven decisions will be made. This resulting schedule document will incorporate commitments made by all Team members with regard to pre-construction and construction activities as follows:

- City of Grand Junction - related to timely reviews and decisions.
- Design Team – meeting commitments regarding design submittals.
- FCI – meeting commitments for cost estimates and construction milestones.

Other pre-construction activities undertaken by the FCI team are:

- Detailed document/constructability reviews of the design documents. We will not only identify coordination issues and challenges, but more importantly, we will develop solutions. We look for critical issues such as:
- Development of a Logistics Plan including crane locations, staging/laydown areas, site access, and protection of the public.
- Completeness and clarity of the design documents.
- Coordination of the design documents amongst disciplines.
- Phasing or sequencing of the work – Minimizes impacts to nearby communities
- Pre-fabrication/Pre-assembly – Minimizes on site labor and can potentially shorten the construction schedule, usually with better quality control.

We also view this part of our pre-construction services as the initial phase of our overall project quality assurance program.

Next FCI develops and initiates the Subcontractor Pre-qualification Plan, and Procurement Strategy, including identifying the sequence and number of Bid Package/ Trade contracts.

At this point we also work on developing the construction planning and sequencing strategy for the project and determine exactly how are we going to build it.

Value Engineering

Next we initiate the Value Engineering (VE) process, including a VE report issued to the Team for review and action. Our approach to VE is not merely to cut cost but rather to enhance the value of the project through select revisions to items such as:

- Building systems selection.
- Materials – selection/suitability and local availability.
- Procurement strategies.
- Constructability issues.

Each of these views will be tempered with questions such as 'What are The City's needs?' and 'What options bring the greatest value to the Grand Junction Department?'.

Our pre-construction plan for managing the project cost, schedule and quality effectiveness entails a comprehensive and integrated management approach. To be successful, all parts of our management plan are carefully integrated with each other, ensuring that we

provide:

- The Team with accurate information in a timely manner in order to make timely decisions.
- Timely answers and solutions to critical questions and issues.

- A proactive approach and process to managing budget, schedule and quality effectiveness issues.

There are two documented facts that attest to the success of FCI's pre-construction phase services: 1) We have never failed to reach a mutually acceptable GMP with a client and 2) The final GMP estimates on our CM/GC projects have averaged about 2% below our previous estimates.

Local Participation

It is always FCI's intent to maximize local community and local subcontractor participation and this can be enhanced by our understanding of the available resources. We will recommend and provide guidance to the design team to specify local products and services so surrounding area subcontractors have every opportunity to compete for the work. We will aggressively solicit local subcontractors/vendors and be sensitive to the local marketplace; however we will also offer our understanding of other markets and allow the City to capture good value if it is not available locally.

We will also perform an open book review of all solicitation efforts and bids received to enable the Team to weigh the pros and cons of possibly paying a premium to use a local versus a non-local subcontractor, and to maximize the amount of money that is kept in the community.

Construction Approach

With the start of work on site, we take our project execution plan developed during the pre-construction phase, coupled with our corporate policies and procedures (tailored to the specifics of this project), to keep tight control of cost, schedule and quality effectiveness. A discussion of our detailed approach to each follows:

Cost Tracking

Accurate and timely cost control data is critical in maintaining the project budget. FCI has realized steady, consistent growth due to our ability to track costs accurately. The following is a brief outline of how our costs are collected and reported to the Construction Team.

Job Cost Set Up

After the budget has been established, a job cost control is set up in CSI format allocating dollars to budget codes for specific tasks including labor, material, subcontractors and suppliers. These budgets are then distributed and reviewed by field personnel authorized to purchase material and administrate subcontracts.

Labor Costs

All FCI labor is collected and cost coded by the Project Superintendent. This information is then reviewed and approved by the Project Manager and turned over to our Payroll Manager, who enters the data to run payroll. Once this data is entered, a job labor report is generated and distributed to the Project Manager and Project Superintendent on a weekly basis. The report is reviewed for accuracy and potential overruns at an early stage when corrective action measures can be implemented to mitigate cost overruns. This allows FCI's team to manage labor costs effectively and maintain the overall labor budgets.

Supplier and Material Costs

All purchased material invoices are collected by the Project Superintendent and checked for quantity and pricing. The Superintendent then codes and forwards them to the Project Manager. The Project Manager checks for accuracy and correct coding, he approves them and forwards them to accounting for processing.

Supplier Applications for Payment are received in the home office and are directed to the Project Manager. The Project Manager checks against current Purchase Agreement amounts and previously paid amounts to verify with the Superintendent that the material is on site, undamaged and is properly stored. He then cost codes the Pay Application and forwards it to accounting for processing.

Subcontractor Pay Applications are handled in much the same way as Supplier Pay Applications. The only difference is their current work status and schedules are reviewed to ensure that all work is on schedule and consistent with the amount requested. If work is behind schedule the payment process may be delayed until that Subcontractor implements a recovery plan. The Pay Request is then forwarded to accounting for processing. Accounting also checks the current application against current subcontract amounts and previous pay requests to avoid any errors.

Once all the above cost data is collected and entered, a job cost variance report is generated on or about the 10th of each month. This report is distributed to the

Project Manager and Superintendent for review. The Project Manager or Superintendent may also request a job history report for further scrutiny. The job history report details every transaction for a particular project.

The above system serves as a check and balance to ensure accurate and timely cost reports, which are essential to the overall success of a project. All of these reports will be made available to the City of Grand Junction upon request.

Quality Control Methodology

The procedures listed below outlines FCI's method of subcontractor coordination, project construction management and quality control.

- Pre-qualification of subcontractors is completed at bid time to optimize cost, quality and safety, and to verify necessary licenses, insurance and bonding.
- Subcontract schedules are integrated into the project master schedule so work may be performed in a productive and cost-effective manner with limited interference.
- Subcontracts that clearly define the scope of work, terms and conditions, and milestone dates.
- Coordination of subcontracts between various crafts enhances communication and cooperation. Close monitoring ensures that standards of safety, quality and performance are met.
- Subcontract costs are committed when the subcontract is written, providing early cost control.
- A schedule of values is developed for invoicing.
- Subcontract progress is verified and accurate, and payments (less retention) are made in a timely fashion. Lower tier lien releases are required.

FCI's Subcontractor Management/Quality Control program is designed to provide supervision, inspection and testing of all items of work, including that of suppliers and subcontractors, to ensure compliance with applicable specifications and drawings. Compliance applies to FCI-furnished equipment, materials, workmanship, construction, finish, functional performance and identification.

Prior to the commencement of construction activities, a pre-installation meeting will be conducted by FCI with the subcontractors. We communicate and establish the ground rules for workmanship. In numerous cases, mock-ups will be constructed by the respective subcontractors. The mock-ups are inspected and reviewed for quality and conformance with the design documents. Once approved, these become the benchmarks against which all further work can be measured for quality conformance.

In addition, weekly coordination meetings with subcontractors are conducted by FCI's Superintendent. This is another means of providing direction regarding expectations for overall quality workmanship, final detailing and trim out.

Information Management & Software

Our job as the General Contractor is to provide timely and accurate information for decision making, keep the project on schedule, provide the perspective of a successful builder to ensure best value, long-term durability, safety and the highest quality. With an open-book policy, FCI makes all information available to the client, at their request, regarding any pricing received at subcontractor bid time, self-performed work pricing, billings during construction, or any other documentation related to the project. During construction, monthly reports are generated detailing project expenditures.

Teamwork is essential for the success of any project and yours is no exception. Our teamwork strategy is straightforward. Keep all team members well-informed, designate a single point of contact to keep all information flow clean and consistent, and meet regularly to make sure all team members stay focused on current project tasks and goals.

FCI utilizes the latest technology to allow your Project Team to professionally manage your project. We use OST (on-screen takeoff) software combined with a custom database of historical costs, for estimating, Primavera Project Planner for Enterprise (P6) for critical path scheduling, and Timberline software for cost tracking and reporting. FCI also employs a Project Web Site to allow all Team members to share information in a timely manner and to increase our speed and the accuracy of communication.

To embrace green standards within our company FCI operates as a Paperless Environment as part of our daily processing of pay applications, invoices, RFIs, submittals and everyday communications. This program enables us to maintain an electronic file cabinet of documentation for a variety of purposes, including ease of processing and reporting to our clients and on-site Project Team.

FCI field teams utilize ipads and Surface tablets to enable real time tracking of daily project progress. This enables our field teams to collaborate more efficiently with subcontractors and Design Consultants. FCI has also implemented ShareFile, which allows our employees to managed data in the field, enabling them to send and receive large files easily and more efficiently.

Safety
FCI is dedicated to providing a safe and healthful work environment for all employees. FCI's exemplary safety record is a direct result of major corporate commitment to safety company-wide and the implementation of a process that consists of meeting four fundamental goals:

1. Eliminate Personal Injury, Illness and Property Damage Losses to FCI and its Clients.
2. Establish Project and Management Responsibilities for Implementation of all Safety Compliance Programs and Enforcement.
3. Ensure Systematic and Uniform Coordination of the Safety Program at each Project Site.
4. Ensure Compliance with all Federal, State, Local, FCI and Client Health and Safety Requirements.

FCI places a high degree of emphasis on the safety of our employees and the employees of our subcontractors. We believe that each worker on site should be able to work in a safe environment and return safely home from work every day. To that end, FCI has full-time regional safety managers who uphold FCI's level of safety through employee training and distribution of recent, relevant information.

Project Closeout
We are committed to not only starting strong, but to finishing strong as well. We understand that our final actions on site leave a lasting impression with our Clients. As a last back-check of workmanship (and prior to the walk-through by the Design Team), FCI will conduct its own pre-punch list review of the installed work. If any deficiencies are identified, a Pre-Punch Work List is prepared and distributed to the respective subcontractors, along with the schedule for completion.

At the completion of the project, FCI will present the City of Grand Junction with a full set of project record documents. The record documents are maintained by the Superintendent on a daily basis during construction, and will contain any changes, directives, or supplemental drawings included in the work. In accordance with the contract, the specifications, and after discussion with the City, a substantial completion date will be established.

The items that are still incomplete at that time will become part of the recorded punch list, to be completed before the deadline established. In addition, Operation and Maintenance Manuals will be provided per the specification. All required start-up and systems operations training will be scheduled at a time that is most convenient. Subcontractors will provide training for the systems they have installed, and will provide warranties where required. When the project has reached final completion, all manuals, warranties, keys, releases, and other items required by the specifications, will be turned over to the Grand Junction Fire Department.

Warranty
It is FCI's goal to exceed our clients' expectations. That is why we take a proactive approach to warranty work or any potential post-construction issues. We will periodically visit with the maintenance staff to develop an open line of communication. This promotes early detection of any issues that may come up, so they can be addressed promptly before they impact building operations or systems.

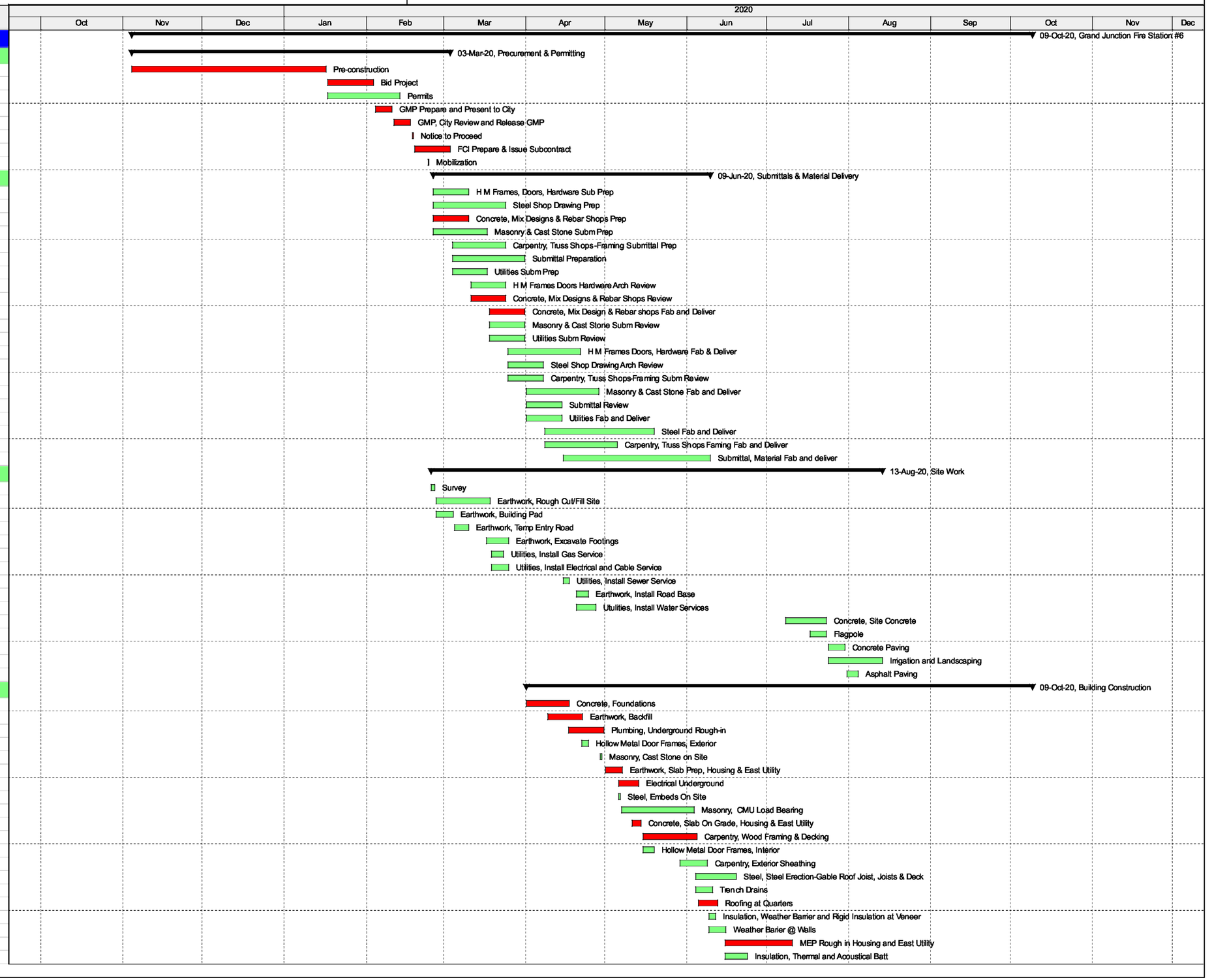
FCI will be accountable for all warranty claims within the first year after substantial completion. We, or the appropriate subcontractor, will return for one year to repair or replace any unsatisfactory portion of the work. At the end of the project, written warranties, as required by the specifications, will be given to the City of Grand Junction as specified within the contract. In addition to periodic post-construction communication and site visits, FCI schedules an 11-month walkthrough with the Fire Department, as appropriate, to identify any issues prior to warranty expiration.

Palisade Fire Station, completed 2013

Grand Junction Fire Station #6

10-Oct-19

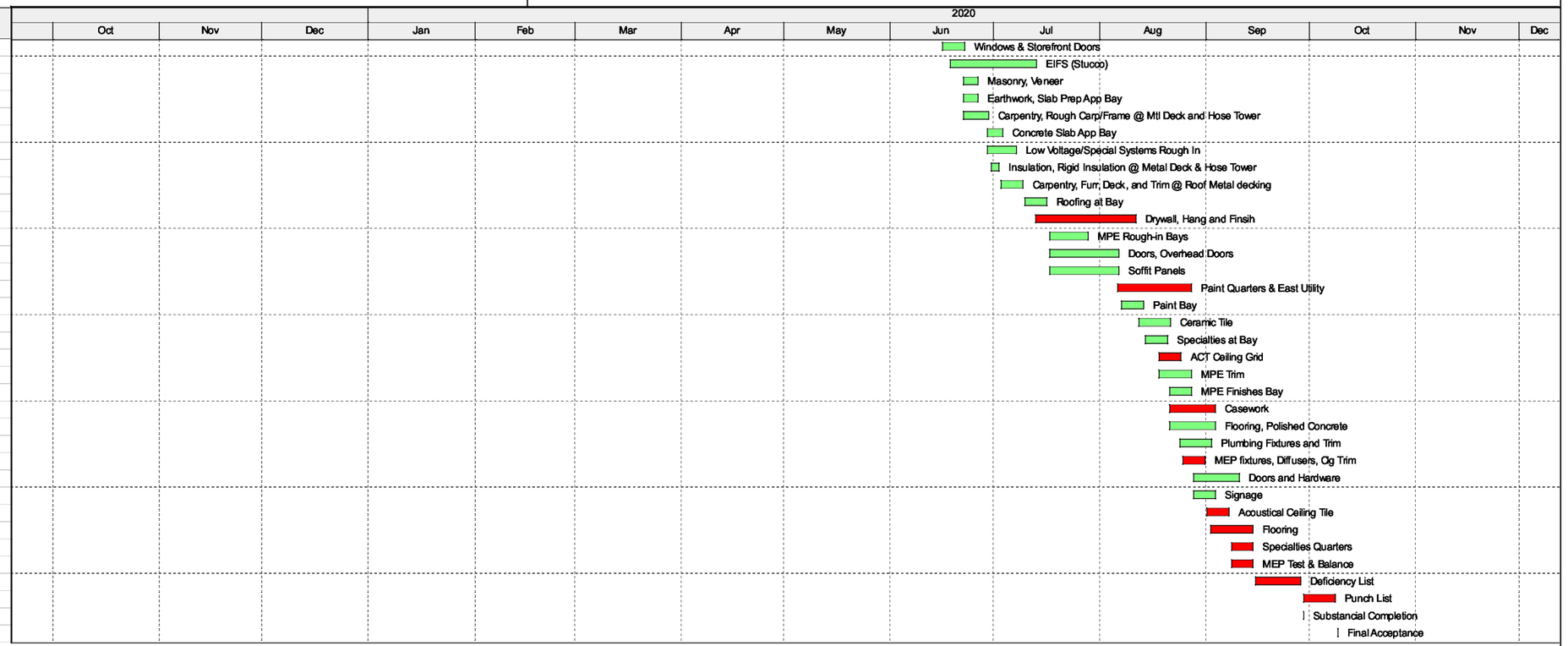
Activity ID	Activity Name	Original Duration	Start	Finish
Grand Junction Fire Station #6		240d	04-Nov-19	09-Oct-20
Precurement & Permitting		83d	04-Nov-19	03-Mar-20
A1000	Pre-construction	50d	04-Nov-19*	16-Jan-20
A1030	Bid Project	12d	17-Jan-20	03-Feb-20
A1520	Permits	20d	17-Jan-20	13-Feb-20
A1550	GMP Prepare and Present to City	5d	04-Feb-20	10-Feb-20
A1560	GMP, City Review and Release GMP	5d	11-Feb-20	17-Feb-20
A1040	Notice to Proceed	1d	18-Feb-20	18-Feb-20
A1570	FCI Prepare & Issue Subcontract	10d	19-Feb-20	03-Mar-20
A1050	Mobilization	1d	24-Feb-20	24-Feb-20
Submittals & Material Delivery		75d	26-Feb-20	09-Jun-20
A1840	H M Frames, Doors, Hardware Sub Prep	10d	26-Feb-20	10-Mar-20
A1870	Steel Shop Drawing Prep	20d	26-Feb-20	24-Mar-20
A1900	Concrete, Mix Designs & Rebar Shops Prep	10d	26-Feb-20	10-Mar-20
A1960	Masonry & Cast Stone Subm Prep	15d	26-Feb-20	17-Mar-20
A1910	Carpentry, Truss Shops-Framing Submittal Pr	15d	04-Mar-20	24-Mar-20
A1990	Submittal Preparation	20d	04-Mar-20	31-Mar-20
A2020	Utilities Subm Prep	10d	04-Mar-20	17-Mar-20
A1850	H M Frames Doors Hardware Arch Review	10d	11-Mar-20	24-Mar-20
A1940	Concrete, Mix Designs & Rebar Shops Revie	10d	11-Mar-20	24-Mar-20
A1950	Concrete, Mix Design & Rebar shops Fab an	10d	18-Mar-20	31-Mar-20
A1970	Masonry & Cast Stone Subm Review	10d	18-Mar-20	31-Mar-20
A2030	Utilities Subm Review	10d	18-Mar-20	31-Mar-20
A1860	H M Frames Doors, Hardware Fab & Deliver	20d	25-Mar-20	21-Apr-20
A1880	Steel Shop Drawing Arch Review	10d	25-Mar-20	07-Apr-20
A1920	Carpentry, Truss Shops-Framing Subm Revie	10d	25-Mar-20	07-Apr-20
A1980	Masonry & Cast Stone Fab and Deliver	20d	01-Apr-20	28-Apr-20
A2000	Submittal Review	10d	01-Apr-20	14-Apr-20
A2040	Utilities Fab and Deliver	10d	01-Apr-20	14-Apr-20
A1890	Steel Fab and Deliver	30d	08-Apr-20	19-May-20
A1930	Carpentry, Truss Shops Faming Fab and Deli	20d	08-Apr-20	05-May-20
A2010	Submittal, Material Fab and deliver	40d	15-Apr-20	09-Jun-20
Site Work		123d	25-Feb-20	13-Aug-20
A1060	Survey	2d	25-Feb-20	26-Feb-20
A1070	Earthwork, Rough Cut/Fill Site	15d	27-Feb-20	18-Mar-20
A1650	Earthwork, Building Pad	5d	27-Feb-20	04-Mar-20
A1440	Earthwork, Temp Entry Road	4d	05-Mar-20	10-Mar-20
A1080	Earthwork, Excavate Footings	7d	17-Mar-20	25-Mar-20
A1630	Utilities, Install Gas Service	3d	19-Mar-20	23-Mar-20
A1640	Utilities, Install Electrical and Cable Service	5d	19-Mar-20	25-Mar-20
A1430	Utilities, Install Sewer Service	3d	15-Apr-20	17-Apr-20
A1480	Earthwork, Install Road Base	5d	20-Apr-20	24-Apr-20
A1620	Utulities, Install Water Services	6d	20-Apr-20	27-Apr-20
A1450	Concrete, Site Concrete	12d	08-Jul-20	23-Jul-20
A2090	Flagpole	5d	17-Jul-20	23-Jul-20
A1490	Concrete Paving	5d	24-Jul-20	30-Jul-20
A1500	Irrigation and Landscaping	15d	24-Jul-20	13-Aug-20
A1470	Asphalt Paving	3d	31-Jul-20	04-Aug-20
Building Construction		137d	01-Apr-20	09-Oct-20
A1580	Concrete, Foundations	13d	01-Apr-20	17-Apr-20
A1120	Earthwork, Backfill	10d	09-Apr-20	22-Apr-20
A1130	Plumbing, Underground Rough-in	10d	17-Apr-20	30-Apr-20
A1740	Hollow Metal Door Frames, Exterior	3d	22-Apr-20	24-Apr-20
A1680	Masonry, Cast Stone on Site	1d	29-Apr-20	29-Apr-20
A1140	Earthwork, Slab Prep, Housing & East Utility	5d	01-May-20	07-May-20
A1660	Electrical Underground	6d	06-May-20	13-May-20
A1670	Steel, Embeds On Site	1d	06-May-20	06-May-20
A1160	Masonry, CMU Load Bearing	20d	07-May-20	03-Jun-20
A1150	Concrete, Slab On Grade, Housing & East Ut	4d	11-May-20	14-May-20
A1170	Carpentry, Wood Framing & Decking	15d	15-May-20	04-Jun-20
A1750	Hollow Metal Door Frames, Interior	3d	15-May-20	19-May-20
A1250	Carpentry, Exterior Sheathing	7d	29-May-20	08-Jun-20
A1180	Steel, Steel Erection-Gable Roof Joist, Joists	12d	04-Jun-20	19-Jun-20
A1760	Trench Drains	5d	04-Jun-20	10-Jun-20
A1230	Roofing at Quarters	6d	05-Jun-20	12-Jun-20
A1720	Insulation, Weather Barrier and Rigid Insulati	3d	09-Jun-20	11-Jun-20
A1730	Weather Barier @ Walls	5d	09-Jun-20	15-Jun-20
A1770	MEP Rough in Housing and East Utility	20d	15-Jun-20	10-Jul-20
A1780	Insulation, Thermal and Acoustical Batt	7d	15-Jun-20	23-Jun-20



Grand Junction Fire Station #6

10-Oct-19

Activity ID	Activity Name	Original Duration	Start	Finish
A1390	Windows & Storefront Doors	5d	16-Jun-20	22-Jun-20
A1270	EIFS (Stucco)	18d	18-Jun-20	13-Jul-20
A1510	Masonry, Veneer	5d	22-Jun-20	26-Jun-20
A1530	Earthwork, Slab Prep App Bay	5d	22-Jun-20	26-Jun-20
A1690	Carpentry, Rough Carp/Frame @ Mtl Deck ar	6d	22-Jun-20	29-Jun-20
A1540	Concrete Slab App Bay	5d	29-Jun-20	03-Jul-20
A1810	Low Voltage/Special Systems Rough In	7d	29-Jun-20	07-Jul-20
A1700	Insulation, Rigid Insulation @ Metal Deck & I	3d	30-Jun-20	02-Jul-20
A1710	Carpentry, Furr, Deck, and Trim @ Roof Meta	5d	03-Jul-20	09-Jul-20
A1220	Roofing at Bay	5d	10-Jul-20	16-Jul-20
A1280	Drywall, Hang and Finsih	22d	13-Jul-20	11-Aug-20
A1200	MPE Rough-in Bays	8d	17-Jul-20	28-Jul-20
A1320	Doors, Overhead Doors	15d	17-Jul-20	06-Aug-20
A2060	Soffit Panels	15d	17-Jul-20	06-Aug-20
A1300	Paint Quarters & East Utility	16d	06-Aug-20	27-Aug-20
A1330	Paint Bay	5d	07-Aug-20	13-Aug-20
A1820	Ceramic Tile	8d	12-Aug-20	21-Aug-20
A1340	Specialties at Bay	5d	14-Aug-20	20-Aug-20
A1290	ACT Ceiling Grid	5d	18-Aug-20	24-Aug-20
A1400	MPE Trim	8d	18-Aug-20	27-Aug-20
A1350	MPE Finishes Bay	5d	21-Aug-20	27-Aug-20
A1360	Casework	10d	21-Aug-20	03-Sep-20
A2050	Flooring, Polished Concrete	10d	21-Aug-20	03-Sep-20
A1830	Plumbing Fixtures and Trim	8d	24-Aug-20	02-Sep-20
A1800	MEP fixtures, Diffusers, Cg Trim	5d	25-Aug-20	31-Aug-20
A2070	Doors and Hardware	10d	28-Aug-20	10-Sep-20
A2080	Signage	5d	28-Aug-20	03-Sep-20
A1790	Acoustical Ceiling Tile	5d	01-Sep-20	07-Sep-20
A1370	Flooring	9d	02-Sep-20	14-Sep-20
A1380	Specialties Quarters	5d	08-Sep-20	14-Sep-20
A2100	MEP Test & Balance	5d	08-Sep-20	14-Sep-20
A1410	Deficiency List	10d	15-Sep-20	28-Sep-20
A1590	Punch List	8d	29-Sep-20	08-Oct-20
A1600	Substancial Completion	0d	29-Sep-20	29-Sep-20
A1610	Final Acceptance	0d	09-Oct-20	09-Oct-20



Current and Anticipated Workload

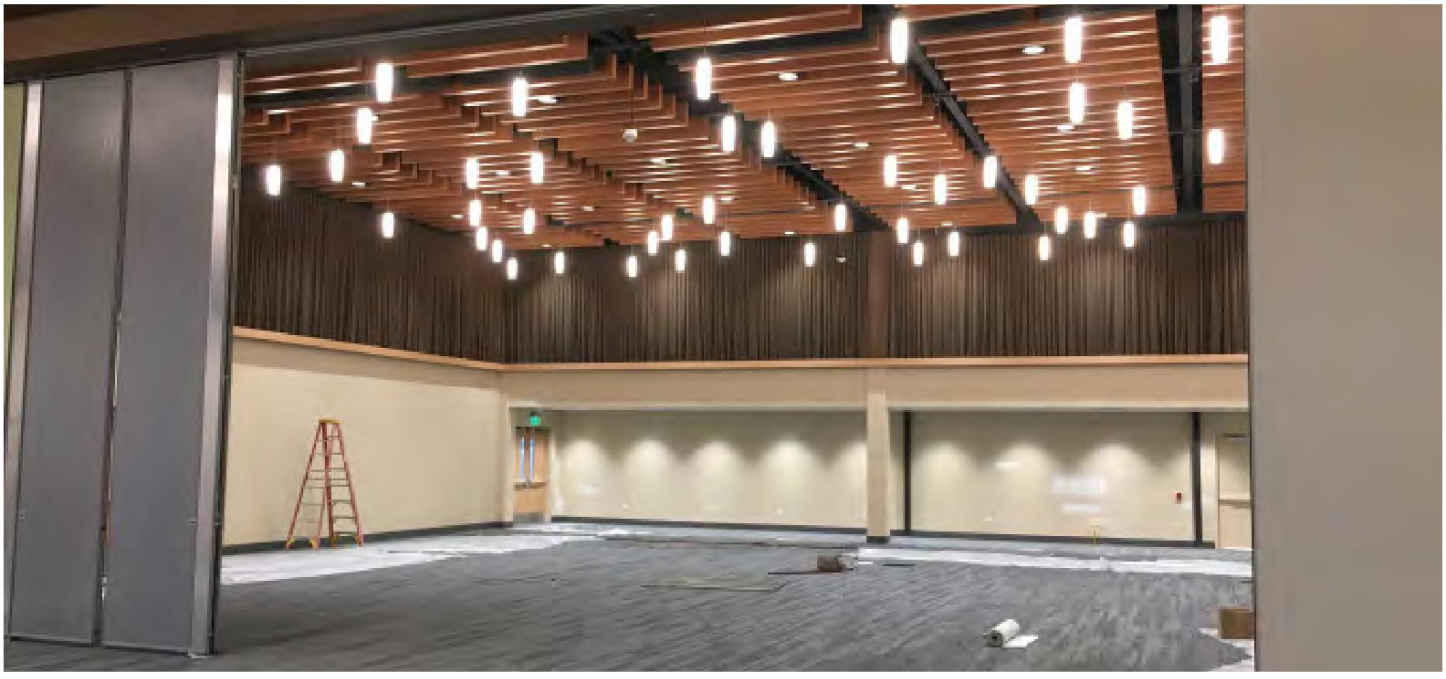
Describe your current workload and expectations in coordinating your current projects, anticipated projects and this project.

Grand Junction Office Workload:
Active Under Contract - $220 million
Total Billed to-date (six months) - $88 million
Amount to complete - $132 million

Brian Young Current Projects / Workload Capacity:
Brian is currently managing both the County Courthouse Renovation and the Detention Facility Renovation for Pitkin County. The Courthouse is scheduled to be complete in June of 2020 and the Detention Facility Renovation will be completed in December. He is also managing the flooring replacement project for the Grand Junction Regional Airport which will be completed by March of 2020. Brian has the workload capacity to manage the City of Grand Junction Fire Station No. 6.

Craig Reid Current Projects / Workload Capacity:
Craig is currently managing the HopeWest Building Renovation which will be completed in March of 2020. He will be available to assist Brian in the pre-construction of the City of Grand Junction Fire Station No. 6 and will be available to on site full time once construction commences.

Evan Walton Current Pre-Construction Services / Workload Capacity:
Evan is currently providing pre-construction services for the HopeWest Phase II HVAC Improvements to be completed next month.



Two Rivers Convention Center Renovation
City of Grand Junction / OVG Facilities
FCI is recently completed the $6.2 million renovation to the Two Rivers Convention Center.

"As the operator of the venue on behalf of the Owner, the City of Grand Junction, our staff was very familiar with the challenges working within the space posed for our operations. FCI was very easy to work with, and as we described our challenges, the continuously brought a depth of experience and understanding to potential solutions. The caliber of people working on our project far exceeded my personal and company's nationwide experience with contracting firms. The FCI team was a pleasure to work with and I would recommend their expertise to anyone looking for construction management no matter the scale. We maximized the available funds to do something the community will feel, see and enjoy for decades to come." - Maria Rainsdon, General Manager, OVG Facilities

Capability / Performance

Provide brief project descriptions and histories that delineate your ability for at least four (4) projects completed in the last five years with a similar size and scope to this project.

In the last five years alone, company-wide, we have proudly and successfully completed over $470 million of work in the municipal sector. Experience has shown us that the most important service we provide is guidance at every stage of the project, from pre-construction through successful completion. Therefore, our approach is based on a proven philosophy wherein the Owner, Architect and FCI agree to work together as a cohesive team.

Company-wide, FCI has completed 66 fire station projects across five states, 46 totaling over $235 million. These projects have consisted of smaller addition and renovations to the $19 million Phoenix Fire Training Academy. Within this submission we have highlighted some of the more relevant projects on the Western Slope.

City of Phoenix Fire Training Academy - Phoenix,

City of Williston Fire Station No. 1 - Williston, ND

City of Grand Junction Fire Station No.4 - Grand Junction, CO

Cheyenne Public Safety Building- Cheyenne, WY

Aspen-Pitkin Airport Rescue and Fire-Fighting Facility - Aspen, CO

City of Grand Junction Orchard Mesa Fire Station No. 4, Grand Junction, CO

FCI was the CM/GC for the new construction of the Orchard Mesa Fire Station No.4. This 9,335 SF new 3-bay fire station was constructed with masonry walls with steel roof tresses for the apparatus bay. The fire station houses a kitchen, workout facility, administrative offices and storage rooms. Special systems installed is a alerting system that interfaces with several building components with the ability to shut off gas and power service to stove and mitigate fire danger. In addition, overhead bay doors automatically open when a call is received, improves the departments response time.

SD = Estimate not requested
DD = $2,745,030
50% - CD = $2,625,770
GMP = $2,576,500

Original / Actual Start Date:
April 2015 / April 2015

Original / Actual Construction Completion Date:
January 2016 / January 31, 2016

Final Contract Amount: $2,508,877
Final Change Order to Reduce GMP to final cost
(-$55,240)

Contract Type:
CM/GC

Project Square Footage:
9,335

Owner:
Ken Watkins
Fire Chief
City of Grand Junction Fire
(970) 549-5800
kenw@ci.grandjct.co.us

Architect:
Jonathon West, AIA
Chamberlin Architects
(970) 242-6804
jwest@chamberlinarchitects.com

CITY OF Grand Junction COLORADO

FIRE

February 23, 2016

To Whom It May Concern:

Re: Letter of Recommendation – FCI Constructors Incorporated

On behalf of the City of Grand Junction and the Grand Junction Fire Department I want to thank FCI Constructors Incorporated and their subcontractors for completion of the first new fire station constructed in Grand Junction in over 10 years. Stan Kiser, Craig Reid and Adam Shuler are to be commended for their hard work and dedication in making sure that the City received a quality product, on time and within budget.

From before the start of construction, FCI was involved in helping the City create a fire station that was of high quality and would provide the community many years of public safety service. The project consisted of a 9,000 square foot building with three large apparatus bays, living quarters for the firefighters and shop and work areas. FCI held weekly meetings to address any issues or questions with city officials, community members and fire department staff. They worked closely with a neighboring school and church to create the least disruption possible to the neighborhood. Ultimately, their desire to produce the best possible product was clearly evident during these discussions and the completed project.

FCI also respected that to the firefighter, a fire station is more than just a brick and mortar structure – it is a "fire house" where the firefighter will spend over one third of his life with a second family. It is a home to fire fighters 24 hours a day, 365 days a year. It serves as a training center for current and future emergency responders and it is a safe place for people in the community.

This is the second fire station that FCI has constructed for Grand Junction. In fact, the first FCI station was used as the design for this station. Once again FCI demonstrated that they understood our needs and demonstrated this through the completed project. For this we send our deepest gratitude and strongest recommendation.

Sincerely,

Ken Watkins
Fire Chief

625 UTE AVENUE, GRAND JUNCTION, CO 81501 P [970] 549 5800 F [970] 549 5810 www.gjcity.org

SIMILAR PROJECT EXPERIENCE

Snowmass Wildcat Fire Station No. 71, Snowmass Village, CO

SD = $12,481,652
DD = $12,578,370
GMP = $12,968,218

Total Change Orders: 14
Final Project Cost
$15,093,740

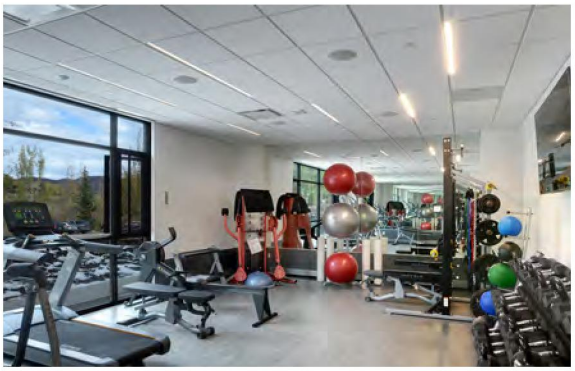
Start of Construction: April 2017
Contractual Substantial Completion Date: August 2018
Actual Completion Dat: November 2018

Project Square Footage:
22,000 / 4-story

Client Reference
Scott Thompson
Fire Chief
Snowmass Wildcat Fire Protection District
970-923-2212

Architect Reference
Ryan Hoffner
Charles Cunniffe Architects
970-925-5590

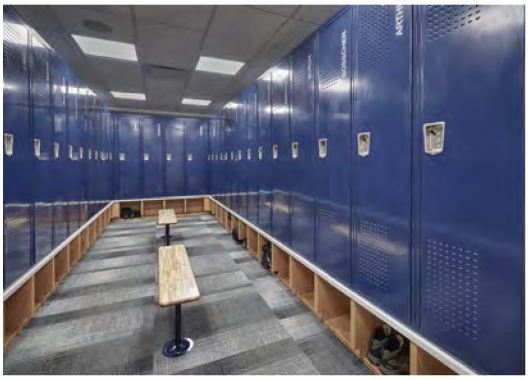
This project consisted of the demolition of the existing 22,000 SF fire station and the construction of a new state-of-the-art 30,000 SF, 4-story fire station. The new station has seven bays for housing apparatus, a command room, kitchen and day rooms, a training tower, seven soundproof bedrooms for the firefighters, six studio apartments as part of the district's employee-housing requirement and resident training program, a 600 SF workout facility, a lobby and a reception area. Despite a massive local wildfire that devastated the area over the summer of construction as well as soil complications that caused delays in the project, FCI completed the fire station one month ahead of schedule.



Pitkin County Ambulance Facility - Aspen, CO

The Aspen Ambulance District Facility is a 13,000 SF two story facility which houses all operations for the Ambulance District. The first story space consists of six large apparatus bay for ambulances and other operations vehicles. Additional rooms on the main level include a training room, decontamination room, ready room and medical storage. The second story living quarters consist of bunk rooms, offices, conference rooms, mechanical / IT rooms, kitchen / day room area and outdoor patio. Site work around the building consisted of cast in place retaining walls, hard-scape walking surfaces and landscaping.

SD = $6,446,295
DD = $6,411,801
GMP = $6,917,623
Total Change Orders: 10
Final Project Cost: $7,119,447



Start of Construction: July 2018
Contractual Substantial Completion Date: September 2019
Actual Completion Date: September 2019

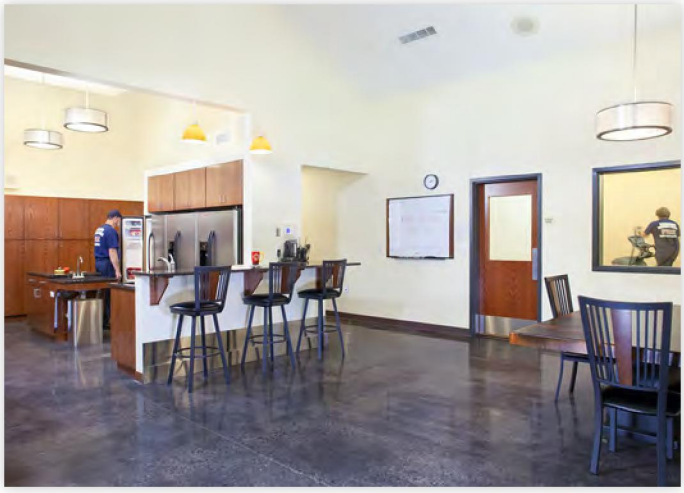
Project Square Footage:
13,000 / 2-Story

Client Reference
Gabe Muething
District Director
Aspen Ambulance District
(970) 544-1580

Architect Reference
Daniel Gartner
Chamberlin Architects
(970) 242-6804

Lakota Canyon Ranch Fire Station (Colorado River Fire Rescue) No. 64

This new 14,800 SF volunteer station features vernacular architectural design to fit into the surrounding community. It features three large fire apparatus bays and two small support staff bays. The bays are supported with a turn-out gear room, decontamination room, EMS storage, and shop/tool room. Living quarters include restrooms, a fitness room, six individual sleeping quarters, a kitchen, a day room and a training room that will provide opportunities for both community meetings and firefighter education. This project implements several sustainable design features including water conserving fixtures, native landscaping, daylighting, use of local and low VOC materials and provisions for future photovoltaics and geothermal heating. It is also designed with several Training By Design© elements to support rappeling, ladder training, confined space training and standpipe charging with sprinkler manifolds.



"Our experience with FCI far exceeded all expectations, and we expected a great deal. From the first meeting with FCI representatives, through the interview process, pre-construction, and construction; FCI representatives performed brilliantly. There had to have been bumps along the way, but we were never aware of them. At close out, comprehensive documentation was provided that covered all aspects of the building, its systems, and components. Literally. You can be assured that should we have building projects in the future, FCI will be our first choice."

Brit C. McLin, Former Fire Chief
Burning Mountains Fire Protection District (now Colorado River Fire Rescue)
Re: Lakota Canyon Ranch Fire Station

SD = $4,138,383
DD = $4,446,553
GMP = $4,494,994
Total Change Orders: -0-
Final Construction Cost:
$4,463,304

Start of Construction
February 2010

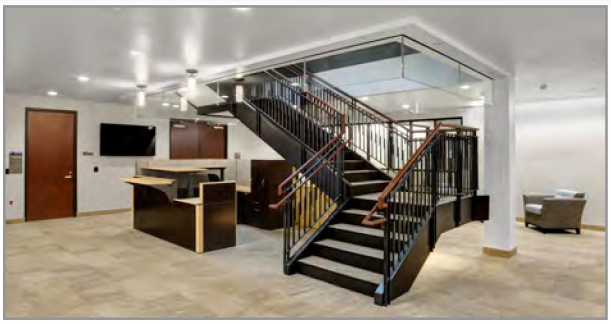
Contractual Substantial Completion Date:
December 2010
Actual Substantial Completion Date:
December 2010

Project Square Footage:
14,800 / 2-Story

Client Reference
Jerry Seifert
Fleet & Facilities Manager
970-625-1243

SIMILAR PROJECT EXPERIENCE

Pitkin County Sheriff Station & Administration Building, Aspen, CO



SD: $16,000,000
DD: $18,766,134
GMP: $18,031,371
Total Change Orders: 23
Final Construction Cost: $18,062,590

Start of Construction: November 2017
Contractual Substantial Completion Date: July 2018
Actual Completion Date: July 2018

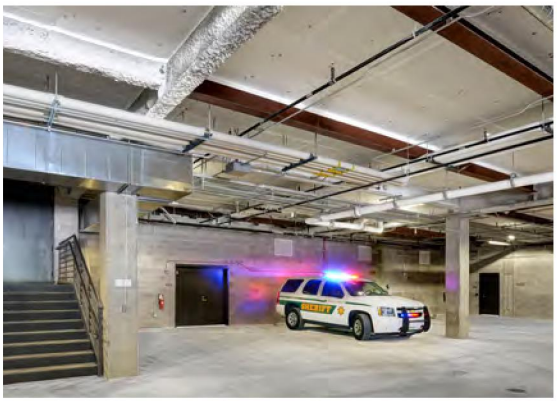
Project Square Footage:
17,876 SF Renovation
31,567 SF Addition
3-Story + underground parking garage

Client Reference
Rich Englehart
Deputy County Manager
Pitkin County
(970) 429-6135
rich.englehart@pitkincounty.com

Description of Scope of Work

FCI was the CM/GC for this interior demolition and renovation of the existing Courthouse Plaza Building (17,876 SF), plus the construction of a new addition (31,567 SF) to include an underground parking garage with three levels of Sheriff and County Administration spaces above. FCI Constructors, Inc. performed Pre-construction services, Bidding/procurement, Construction and Construction Administration, Closeout and Commissioning Services.

Mechanical/Special Systems: Dedicated outdoor air units (DOAS), VRF heat pumps and fan coils (for both cooling and heating), duct heaters, exhaust fans, water heaters, and hydronic unit heaters.



Bonding Capacity

Provide proof of bonding capacity for this project including C/GC fees along with current and antcipated project workloads.

MAXIMUM BONDING CAPACITY: $500,000,000
CURRENT VALUE OF BONDED PROJECTS: $250,000,000

The expected construction cost of the Two Rivers Convention Center renovation is under FCI's single project bonding limit and typical of similar completed projects. We are fully confident in our ability to manage and construct this project without negatively impacting our company's financial strength, equipment availability, or personnel resources.

FCI has never been involved in any project where delay claims or liquidated damages were assessed. Our bonding company has never acted on our behalf.

USI UNDERSTAND. SERVICE. INNOVATE.

October 1, 2019

Duane Hoff Jr., Senior Buyer
City of Grand Junction

RE: FCI Constructors, Inc.
Project: City of Grand Junction Fire Station #6
Budget: $5,000,000

Dear Duane Hoff Jr.:

Our agency services the Surety Program for FCI Constructors, Inc. We are personally acquainted with Mr. Ed Forsman, President of FCI Constructors, Inc. and we have found him to be an individual of high character and integrity. FCI Constructors, Inc. is one of the premier construction firms in the Rocky Mountain Area and has been doing business with USI since 2004. In the time that our firm has done business with FCI, there have been no adverse bond claims on record. FCI has always handled themselves with the utmost professionalism and integrity.

Surety bonds for FCI Constructors, Inc. have been written through the Western Surety Company since 1989. Due to the strong financial strength of this organization we have agreed to projects in excess of $100,000,000 and an aggregate capacity in excess of $500,000,000 with over half of their available bonding capacity available. This is merely a working parameter and does not constitute maximum bond capacity. Western Surety Company is listed in the most recent issue of the Federal Register, Circular 570, and US Treasury Department and possesses a current Best rating of A and XIII. Western Surety Company is licensed to conduct business in the State of Colorado.

We understand that FCI Constructors, Inc. will be submitting a proposal to you on the above referenced project. The addition of your project to FCI Constructors work program will not affect their bond capacity.

FCI Constructors, Inc. has an excellent reputation and experience in providing input on value engineering options to optimize construction quality and cost effectiveness within a specified budget. Other considerations within FCI's area of expertise are project scheduling and the integrity of all design alternatives.

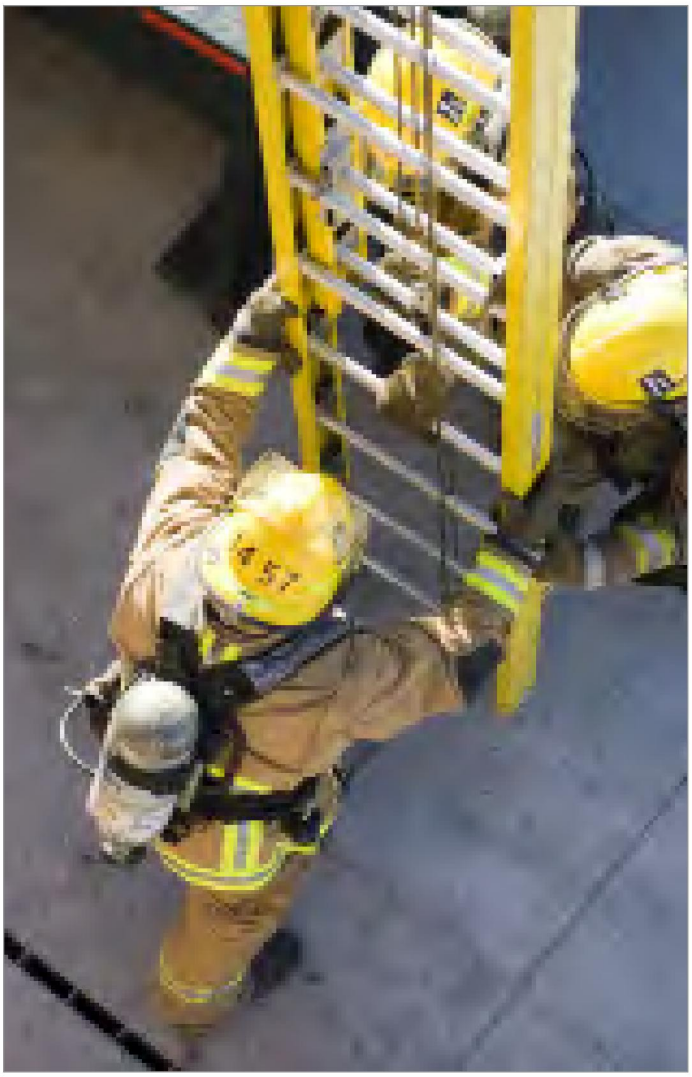
We strongly recommend FCI Constructors, Inc. to you and if you should need any additional information or services, please advise at your convenience.

Sincerely,

SCL

Cory A. Clauss
Vice President – Surety
303.831.5218

References



Gabe Muething
District Director
Aspen Ambulance District
970-544-1580

Norma West
Senior Director of Finance
HopeWest
970-773-3886

Chief Scott Thompson
Snowmass Wildcat Fire Protection District
sthompson@swfpd.com
970-923-2212

Jay Valentine
Assistant Financial Operations Manager
City of Grand Junction
970-244-1517

Fee Proposal

Fee For Pre-Construction Services: 0%
There will be no cost to the City of Grand Junction if we cannot come to a mutually agreeable Guaranteed Maximum Price.

Contractor Overhead and Profit: 4.0%

Client#: 1082345 FCICON

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/13/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Client Manager	
USI Insurance Services, LLC P.O. Box 7050 Englewood, CO 80155 800 873-8500	PHONE (A/C, No, Ext): 800 873-8500	FAX (A/C, No): 303-831-5295
	E-MAIL ADDRESS: den.contractors@usi.com	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Arch Insurance Company	11150
INSURER B : Continental Insurance Company	35289
INSURER C : Aspen American Insurance Company	43460
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
FCI Constructors, Inc.
PO Box 1767
Grand Junction, CO 81502

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY X PRO-JECT [ ] LOC OTHER:	X	X	ZAGLB9220003	10/01/2019	10/01/2020	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$2,000,000 $100,000 $10,000 $2,000,000 $4,000,000 $4,000,000 $
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY	X	X	ZACAT9242103	10/01/2019	10/01/2020	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$2,000,000 $ $ $ $
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $10,000	X	X	6079434568	10/01/2019	10/01/2020	EACH OCCURRENCE AGGREGATE $	$10,000,000 $10,000,000 $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N / N/A If yes, describe under DESCRIPTION OF OPERATIONS below		X	ZAWCI9389203	10/01/2019	10/01/2020	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
C	Excess Liability	X	X	CX00E1619	10/01/2019	10/01/2020	$15,000,000 Ea Occur $15,000,000 Aggregate	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Grand Junction Fire Station #6, Project 10-19-050

As required by written contract or written agreement, City of Grand Junction is included as Additional Insured as respects General Liability and Auto Liability but only as respects work performed on behalf of the named insured. The General Liability, Auto Liability and Workers Compensation policies) provide a Waiver of Subrogation when required by written contract.

CERTIFICATE HOLDER

City of Grand Junction
250 North 5th St.
Grand Junction, CO 81501

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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FCICON

ACORD™

EVIDENCE OF PROPERTY INSURANCE

DATE (MM/DD/YYYY) 11/13/2019

THIS EVIDENCE OF PROPERTY INSURANCE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE ADDITIONAL INTEREST NAMED BELOW. THIS EVIDENCE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS EVIDENCE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE ADDITIONAL INTEREST.

AGENCY	PHONE (A/C, No, Ext): 800 873-8500
USI Insurance Services, LLC P.O. Box 7050 Englewood, CO 80155	
FAX (A/C, No):	E-MAIL ADDRESS: den.contractors@usi.com
CODE:	SUB CODE:
AGENCY CUSTOMER ID #: 1082345	

COMPANY: Travelers Indemnity Company

INSURED: FCI Constructors, Inc.
PO Box 1767
Grand Junction, CO 81502

LOAN NUMBER	POLICY NUMBER
	QT660142D8844TIL19

EFFECTIVE DATE	EXPIRATION DATE	CONTINUED UNTIL TERMINATED IF CHECKED
10/01/19	10/01/20	☐

THIS REPLACES PRIOR EVIDENCE DATED:

PROPERTY INFORMATION

LOCATION/DESCRIPTION

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS EVIDENCE OF PROPERTY INSURANCE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

COVERAGE INFORMATION

COVERAGE/PERILS/FORMS	AMOUNT OF INSURANCE	DEDUCTIBLE
Builders Risk, Special Form, Reporting Form		
Replacement Cost		
Fire Resistive construction	75,000,000	10,000
Frame or Joisted Masonry construction	25,000,000	10,000
Flood, sub limit	10,000,000	25,000
Earth Movement, sub limit	10,000,000	25,000
Transit	250,000	10,000
Temporary Location	250,000	10,000
(See Attached Coverage Info.)		

REMARKS (Including Special Conditions)

****** Description of Operations ******
Grand Junction Fire Station #6, Project 10-19-050

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

ADDITIONAL INTEREST

NAME AND ADDRESS
City of Grand Junction
250 North 5th St.
Grand Junction, CO 81501

☐ MORTGAGEE ☐ ADDITIONAL INSURED
☐ LOSS PAYEE

LOAN #

AUTHORIZED REPRESENTATIVE

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SABBC

COVERAGE INFORMATION (Continued from page 1.)

COVERAGE/PERILS/FORMS	AMOUNT OF INSURANCE	DEDUCTIBLE