

**SANTA FE COUNTY  
PUBLIC WORKS DEPARTMENT**

**INVITATION FOR BID**



**IFB# 2017-0262-PW/KE**

**CONSTRUCTION SERVICES TO REMODEL  
THE SANTA FE MOUNTAIN CENTER**

**APRIL 2017**

**SANTA FE COUNTY**

**Table of Contents**

**BIDDING DOCUMENTS**

*Advertisement for Bid*.....3

*Information for Bidders*.....4

*Bid Proposal*.....15

*Bid Form* .....17

*Bid Sheets* .....19

*Non-Collusion Affidavit of Prime Bidder*.....20

*Non-Collusion Affidavit of Subcontractor*.....21

*Certificate of Non-Segregated Facilities*.....23

*Certification of Bidder Regarding Equal Employment Opportunity* .....24

*Certification of Subcontractor Regarding Equal Employment Opportunity* .....25

*Bid Bond*.....26

*Performance Bond*.....27

*Labor and Material Payment Bond*.....29

*Subcontractor Listing*.....31

**APPENDICES**

*A. Acknowledgement of Receipt of Invitation to Bid Form* .....34

*B. Campaign Contribution Disclosure Form*.....35

*C. Resident Veterans Preference Certification* .....38

*D. Sample Construction Contract*.....40

*E. Specifications and Plans*.....97

**ADVERTISEMENT  
INVITATION FOR BID  
IFB# 2017-0262-PW/KE  
CONSTRUCTION SERVICES TO  
REMODEL THE SANTA FE  
MOUNTAIN CENTER  
COMMODITY CODES:  
90922, 91065**

The Santa Fe County Public Works Department requests bids for the purpose of procuring a licensed construction company for the Construction Services to remodel the Santa Fe Mountain Center by adding a new kitchenette and a storage closets on the main level and converting existing mezzanine to office space with two additive alternates; a) a furnace and water heater closet, b) a storage closet in Office 1 and Office 3, as indicated in the Architects Specifications and Drawings. Bids may be held for ninety (90) days subject to all action by the County. Santa Fe County reserves the right to reject any and all bids in part or in whole. A completed bid package must be submitted in a sealed container indicating the bid title and number along with the bidding firm's name and address clearly marked on the outside of the container. **All bids must be received by 2:00 PM (MDT) on Thursday, April 27, 2017 at the Santa Fe County Purchasing Division, 142 W. Palace Avenue (Bokum Building, Second Floor), Santa Fe, N.M. 87501.** By submitting a bid for the requested materials and/or services each firm is certifying that their bid is in compliance with regulations and requirements stated within the IFB package.

**A Pre-Bid Conference & Site Visit will be held on Tuesday, April 11, 2017 at 2:30 PM (MDT) at the Santa Fe Mountain Center located at 1160 Parkway Drive, Suites A & B, Santa Fe, NM 87507. The Pre-Bid Conference & Site Visit is not MANDATORY but your attendance is strongly encouraged.**

**EQUAL OPPORTUNITY EMPLOYMENT:** All qualified bidders will receive consideration of contract(s) without regard to race, color, religion, sex, national origin, ancestry, age, physical and mental handicap, serious mental condition, disability, spousal affiliation, sexual orientation or gender identity.

An Invitation for Bid packages is available by contacting Karen K. Emery, Santa Fe County, by telephone at (505) 992-6759, by email at [kkemery@santafecountynm.gov](mailto:kkemery@santafecountynm.gov) or by accessing the Santa Fe County website at [http://www.santafecountynm.gov/asd/current\\_bid\\_solicitations](http://www.santafecountynm.gov/asd/current_bid_solicitations)

**BIDS RECEIVED AFTER THE DATE AND TIME SPECIFIED ABOVE WILL NOT BE ACCEPTED.**

Santa Fe County  
Publish: April 2 and 3, 2017

## INFORMATION FOR BIDDERS

Bids are requested by Santa Fe County for construction services to construct a kitchenette and storage closets on the main level in Suite A and B and converting the existing mezzanine into office spaces with two additive alternates; a) a furnace and water heater closet, b) a storage closet in Office 1 and Office 3 in accordance with the specifications and other contract documents prepared by Robert C. Rayner of R2 Architectural Design, 730 San Mateo Blvd., SE, Suite 1, Albuquerque, NM 87108.

### 1. LOCATION AND DESCRIPTION OF WORK:

The Santa Fe Mountain Center is located at 1160 Parkway Drive, Suites A & B, Santa Fe, NM 87507. The Santa Fe Mountain Center has requested that a new kitchenette, storage closets and office space be constructed in the existing space within the facility.

### 2. SCOPE OF WORK

Contractor shall:

- a) Build a new kitchenette within existing space that will include: New base cabinets with countertop(s), new upper cabinets, new kitchen sink with disposal, new stove with microwave/hood, new dishwasher and new mop sink. The new kitchenette will include a new ceramic tile floor. Please refer to construction documents.
- b) Convert two existing loft areas into office space including new doors.
- c) Build new storage closet(s) including doors.
- d) Electrical as per construction documents prepared by Electrical Engineer.
- e) Plumbing/Mechanical as per construction documents as prepared by Mechanical Engineer.
- f) Contractor shall conduct a site assessment of the project area with County staff to review the project location and conditions.
- g) All work to be verified and completed by contractor as per construction documents prepared by Architect.
- h) Contractor shall be responsible to obtain any and all required permits for the work
- i) Work shall comply with all applicable State, Federal and Local regulations.
- j) During construction contractor shall provide a safe and dust free environment
- k) Upon completion contractor shall ensure work area is left clean and free of debris and ready to occupy.

Add Alternate No. 1: Enclose existing furnace and water heaters as shown on sheet A102.

Add Alternate No. 2: Add new storage closets in 2 of the new office spaces as shown on sheet A102.

The Contractor shall supply all labor, materials and equipment necessary to complete the work in accordance with the construction plans and specifications.

The bid shall be in the form of a lump sum with two additive alternates as requested on the bid sheets.

The bid shall include all permits, fees, tie-in fees for all utilities, overhead and profit and incidental costs in the bid amounts. All applicable taxes **shall not** be included in the bid amounts.

All applicable laws and ordinances and the rules and regulations of all authorities having jurisdiction over the project shall apply to the contractor and all agreements between the contractor and the County.

3. **TIME AND PLACE OF RECEIVING AND OPENING BIDS: All bids must be received by 2:00 PM (MDT) on Thursday, April 27, 2017 at the Santa Fe County Purchasing Division, 142 W. Palace Avenue (Bokum Building, Second Floor), Santa Fe, N.M. 87501.** A bid received after the specified time will not be considered and will be returned to the bidder unopened.
4. **SPECIFICATIONS:** The construction of this project will be in accordance with the specifications and drawings provided by the County, which are included in this bid package.
5. **CONTRACT TIME:** The number of days for the completion of work (the contract time) is 180 calendar days.
6. **COPIES OF BIDDING DOCUMENTS:** Bid Documents are available by contacting Karen K. Emery, Santa Fe County, by telephone at (505) 992-6759 or by email at [kkemery@santafecountynm.gov](mailto:kkemery@santafecountynm.gov), or by visiting our website at [www.santafecountynm.gov/asd/current\\_bid\\_solicitations](http://www.santafecountynm.gov/asd/current_bid_solicitations).

Bidders shall use complete sets of Bidding Documents in preparing bids; the owner assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

No license or grant of use of the Bidding Documents is conferred by issuance of copies of the bidding documents.

7. **Pre-Bid Conference and Site Visit:** A Pre-Bid Conference and Site Visit will be held on **Tuesday, April 11, 2017 at 2:30 PM (MDT) at the Santa Fe Mountain Center located at 1160 Parkway Drive, Suites A & B, Santa Fe, NM 87507.** **The Pre-Bid Conference & Site Visit is not MANDATORY but your attendance is strongly encouraged.**
8. **BIDDER'S REPRESENTATION:** By submitting a bid the bidder represents that: a) the bidder has read and understands the Bid Documents and Contract Documents; b) the bid is made in compliance with the Bid Documents and Contract Documents; c) The bidder has visited the site and has become familiar with local conditions under which the Work is to be performed, and has correlated the bidder's personal observations with the requirements of the proposed Contract Documents; d) the bidder has familiarized itself with federal,

state and local laws, ordinances, rules, and regulations affecting performance of the Work; and e) the bid is based upon the materials, equipment and systems required by the Bid Documents without exception; and f) the County shall rely on these representations.

9. INTERPRETATIONS/ADDENDA: All questions about the meaning or intent of the contract documents shall be submitted to the Procurement Manager in writing. Replies will be issued by written addenda mailed or delivered to all parties recorded by the printer, as having received the bidding documents at least five (5) calendar days before the scheduled bid opening date. Questions received less than seven (7) calendar days prior to the date for opening of bids will not be answered. Only questions answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Written questions or inquiries in relation to the Invitation for Bid will be directed to:

Karen K. Emery, Procurement Specialist Senior  
Santa Fe County Purchasing Division  
142 W. Palace Avenue (Second Floor)  
Santa Fe, NM 87501  
Ph. (505) 992-6759  
Fax (505) 989-3243  
Email – [kkemery@santafecountynm.gov](mailto:kkemery@santafecountynm.gov)

Addenda will be transmitted to all bidders that are listed on the Bid Holder's List at the printer(s) who have received a complete set of Bid Documents.

Copies of addenda will be made available for inspection wherever Bid Documents are on file for that purpose. Each addendum shall be part of the contract documents as specified in the written contract, attached to these specifications, (see Appendix D).

Addenda will be issued no later than five (5) working days prior to the date for receipt of bids except an addendum withdrawing the request for bids or one which includes postponement of the date for receipt of bids.

Each bidder shall ascertain prior to submitting a bid that the bidder has received all addenda and the bidder shall acknowledge receipt in the bid.

10. PREFERENCES IN PROCUREMENT:

***New Mexico In-state Preference.***

- A. New Mexico law, Section 13-1-22 NMSA 1978, provides a preference in the award of a public works contract for an **“in-state resident contractor”**. Application of a resident contractor preference requires the bidder to provide a copy of a valid and current certificate as a resident contractor. Certificates are issued by the state taxation and revenue department.

If a bidder submits with its bid a copy of a valid and current in-state resident contractor certificate, the bidder's bid will be deemed to be 5% lower than the bid actually submitted.

Certification by the department of taxation and revenue for the resident contractor takes into consideration such activities as the business or contractor's payment of property taxes or rent in the state and payment of unemployment insurance on employees who are residents of the state.

**OR**

**B. *New Mexico Resident Veteran Preference.***

New Mexico law, Section 13-1-22 NMSA 1978, provides a preference in the award of a public works contract for a "**resident veteran contractor**". Certification by the department of taxation and revenue for the resident veteran contractor requires the bidder to provide evidence of annual revenue and other evidence of veteran status.

A bidder who wants the veteran contractor preference to be applied to its bid is required to submit with its bid the certification from the department of taxation and revenue and the sworn affidavit attached hereto as Appendix C.

If a bidder submits with its bid a copy of a valid and current veteran resident contractor certificate, the bidder's bid will be deemed to be 10%, 8% or 7% lower than the bid actually received, depending on the business' annual revenue.

**The resident contractor preference is not cumulative with the resident veteran contractor preference.**

Additional information about obtaining the certificate as a resident contractor and resident veteran contractor may be found at:  
<http://www.tax.newmexico.gov/Businesses/Pages/In-StatePreferenceCertification.aspx>.

11. SUBCONTRACTORS, SUPPLIERS AND OTHERS: The contractor shall be required to fully comply with the Subcontractors Fair Practices Act, NMSA 1978, 13-4-31 to 13-4-42.
  - A. The contractor, in the bid documents, must identify in writing to the County those portions of the work that it proposes to subcontract and after the Notice of Award, may only subcontract other portions of the work with the County's written consent.
  - B. Any subcontractor who will be providing more than \$5,000 or one-half of one percent of the architect's or engineer's estimate of the total project cost (not including alternates) whichever is greater for any service, must be listed on the Subcontractor Listing. The subcontractor listing threshold for this IFB is \$5,000.

12. **SUBSTITUTIONS:** The materials, products, and equipment described in the Bid Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitution will be considered prior to receipt of bids.
13. **WAGE RATES/REGISTRATION WITH THE LABOR AND INDUSTRIAL DIVISION OF THE LABOR DEPARTMENT:** The contractor shall be required to fully comply with the Public Works Minimum Wage Act, NMSA 1978, 13-4-11 thru 13-4-17. If the minimum wage rate determination for the project is not included in the initial Bid Documents, it will be furnished in an addendum.

A contractor or subcontractors who submit a bid valued at more than sixty thousand dollars (\$60,000) for a public works project that is subject to the Public Works Minimum Wage Act must be registered with the New Mexico Workforce Solutions at the time of the bid opening. The registration number shall be provided in the bid submitted by the contractor in the space provided for subcontracts with work proposed. After the bid opening, the registration numbers will be verified by the County and the bid will be determined to be non-responsive and disqualified if the registration numbers are *“inactive”* and the contractor does not provide proof of the required registration for itself or its subcontractors for work proposed over sixty thousand dollars (\$60,000).

For a public works contract whose value is \$60,000 or more, the NM Public Works Minimum Wage Act, 13-4-11 NMSA 1978, also requires all tiers of subcontractors to submit certified weekly payroll records to the general contractor and the County biweekly. If this provision applies, and shall require all tiers of subcontractors, to submit certified weekly payroll records to the contractor and the County’s Project Manager for this project.

14. **BID FORM:**
  - A. The bid forms are included in the bidding documents; additional copies may be obtained from the Santa Fe County Purchasing Division.
  - B. Bid forms must be completed in either ink or typewritten. The bid price of each item on the form must be stated in numerals and written words; in case of an error in extensions in the unit price schedule the unit price shown in written words shall govern.
  - C. Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate office accompanied by evidence of authority to sign) and the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
  - D. Bids by partnerships must be executed in the partnership name and signed by a partner, their title must appear under their signature and the official address of the partnership must be shown below the signature.
  - E. All names must be typed or printed below the signature.
  - F. The bid shall contain an acknowledgment of receipt of all addenda (the numbers of which shall be filled in on the bid form).



15. **BID SECURITY:** Each individual bid shall be accompanied by bid security equal to 5% of the amount of the bid. Such bid security shall be in the form of a certified or cashier's check made payable to the County or a surety bond issued by a surety authorized to conduct business in the State of New Mexico and who is approved in federal circular 570 as published by the U.S. Treasury Department.

By submitting the bid and providing the bid security, the bidder pledges to enter into a binding contract with the County and will furnish bonds covering the faithful performance of the contract and payment of all obligations arising hereunder.

The County will have the right to retain the bid security of bidders to whom an award is being considered until either the contract has been executed and bonds, if required, have been furnished or the specified time has elapsed so that bids may be withdrawn or all bids have been rejected.

16. **POWER OF ATTORNEY:** Attorneys in fact who sign bonds must attach certified effective copies of their Power of Attorney to all bonds.
17. **QUALIFICATION OF BIDS:** All contractors and subcontractors must have a valid New Mexico license appropriate to the work herein specified at the time the bid is submitted.
18. **SUBMISSION OF BIDS:** Bids shall be submitted at the time and place indicated in the "Advertisement for Bids" on page 3 of this IFB and shall be enclosed in an opaque sealed envelope, marked with the project title, name and address of the bidder, N.M. License Number, and accompanied by the list of subcontractors and other required documents. All blanks must be filled in. Conditional bids will not be considered. The envelope shall be addressed to:

Karen K. Emery, Procurement Specialist, Senior  
Santa Fe County Purchasing Division  
142 W. Palace Avenue (Second Floor)  
Santa Fe, NM 87501

19. **MODIFICATION AND WITHDRAWAL OF BIDS:** A bid may not be modified, withdrawn or canceled by the bidder following the time and date designated for the receipt of bids, and each bidder so agrees to these conditions by submitting a bid.

Prior to the time and date designated for receipt of bids, a bid submitted may be modified or withdrawn by notice to the County at the address designated for receipt of bids. Such notice shall be in writing and signed by the bidder.

Upon receipt such written confirmation shall be date and time stamped by the County on or before the date and time set for receipt of bids. A modification of a bid shall be worded as not to reveal the amount of the original bid.

20. **GROSS RECEIPTS TAXES:** The amount of the bid shall exclude applicable New Mexico Gross Receipts Taxes or applicable local option taxes. The applicable gross

receipts tax or applicable local option taxes shall be computed and shown as a separate amount on each request for payment made under the contract.

21. **CONSIDERATION OF BIDS:** Bids received on time will be opened publicly and will be read aloud, and an abstract of the amounts of the base bids and alternates or bid items, if any, will be made available to the bidders. Each bid shall be open to public inspection.
22. **BID OPENING PROCEDURE:** The person or persons opening the bids shall verify that the requirements of the Instruction to Bidders have been fulfilled, and shall read aloud the name of each apparently responsive bidder and the bid amount(s). If any requirements have not been met, the bid shall be deemed non-responsive and disqualified. Each bid shall be reviewed for the following:
  - A. Bid Proposal – Include name of bidder, type of organization, contractor’s license number and DOL registration number and all required signatures.
  - B. Bid Form- Include acknowledgement of all addenda, if applicable, bidder’s name, title, address, telephone number, contractor’s license number and type, United States Treasury number, resident preference certificate, if applicable, and all required signatures.
  - C. Bid Sheet-Include best price offered, **excluding** GRT.
  - D. Non-Collusion Affidavit for Prime Bidder Form-Include all required notarized signatures.
  - E. Certification of Non-Segregated Facilities Form-Include all required notarized signatures.
  - F. Certification of Bidder Regarding Equal Employment Opportunity Form-Include all required signatures.
  - G. Bid Bond-Include all required notarized signatures.
  - H. Bid Security- Shall be in the form of a certified or cashier’s check made payable to the County or a surety bond issued by a surety.
  - I. Subcontractor’s Listing Form-List of all subcontractors performing work over \$5,000.00, include name, address, telephone number, license number and **active** NM Department of Workforce Solutions Registration Number.
  - J. Campaign Contribution Disclosure Form-Include all required signatures.
  - K. Valid certificate of resident business or resident contractor.

**IF ANY OF THESE REQUIREMENTS HAVE NOT BEEN MET, THE BID MAY BE DISQUALIFIED AND CONSIDERED NON-RESPONSIVE.**

23. **BIDS TO REMAIN OPEN:** All bids shall remain open for ninety (90) days after the day of the bid opening.
24. **AWARD OF CONTRACT:**
  - A. The County reserves the right to reject any and all bids and waive any and all informalities or technicalities and the right to disregard all nonconforming or conditional bids or counter proposals.

- B. If a contract is to be awarded, it will be awarded to the lowest responsible bidder submitting a bid that is either: (i) the lowest base bid; or (ii) the lowest bid including the base bid and the alternate(s); or (iii) the lowest bid including the base bid and any combination of the alternates.
  - C. If the lowest responsible bidder has otherwise qualified, the lowest bidder may negotiate with the County for a lower bid if the lowest bid is within **ten percent** over budgeted project funds in order to prevent all bids from being rejected. No change in the original scope and/or terms and conditions will be allowed. Negotiations may be permitted with product, materials, and equipment alternatives as determined to be in the best interest of the County.
  - D. Alternates may be accepted and awarded in any manner or order based on available budget. The County reserves the right not to award any particular alternate.
25. **LIQUIDATED DAMAGES:** Liquidated damages in the amount of five hundred dollars (\$500.00) per each calendar day shall be assessed after the completion date (as adjusted by change orders) until the issuance of a Certificate of Substantial Completion for the entire project.
  26. **PREFERENCES IN EQUIPMENT AND MATERIAL:** In the construction of this project, the County has no preference for any process, type of equipment, or kind of material, but will consider all processes, types of equipment or kinds of material offered on a usual competitive basis if they are in fact equal to that specified and will accomplish the purpose intended. The County reserves the right to be the sole judge as to whether or not a different process, type of equipment or kind of material offered is in fact equal to that specified.
  27. **LICENSE OR ROYALTY FEES:** Licenses and/or royalty fees for products or for processes must be paid for directly by the contractor.
  28. **PERMITS:** It is the responsibility of the contractor and each subcontractor to obtain permits and inspections required by the County and/or the State of New Mexico or any other entity that may have jurisdiction over the construction.
  29. **COLLUSION:** No bidder shall be interested in more than one bid. Collusion among bidders or the submission of more than one bid under different names by any firms or individual shall be cause for rejection of all bids in question without consideration.
  30. **QUANTITIES:** The quantities set forth in the bid proposal are estimated quantities on which bids will be compared and which will be the basis for award of contract. Payment will be made for work actually performed.
  31. **PROTEST PROCEDURE:** Any bidder who is aggrieved in connection with procurement may protest to the County Purchasing Manager as set forth in Resolution No. 2006-60 by the Board of County Commissioners. A copy of Resolution No. 2006-60 is available upon request. The protest must be in writing and be submitted within fifteen (15) days after the facts or occurrences. The complete procedures and requirements

regarding protests and resolution of protests are available from the Santa Fe County Purchasing Division upon request.

32. **CONTRACTOR'S QUALIFICATION STATEMENT:** A bidder to whom award of a contract is under consideration shall submit, upon request, information and data to prove that its financial resources, production or service facilities, personnel, and service reputation and experience are adequate to make satisfactory delivery of the services, construction, or items of personal property described in the Bidding Documents.
33. **BOND REQUIREMENTS – PERFORMANCE BOND AND PAYMENT BOND:** If awarded the contract, a bidder shall furnish bonds covering the faithful performance of the contract and payment of all obligations arising thereunder. The amount of the bonds, performance and payment, shall each be equal to 100% of the contract sum. Bonds shall be issued by a surety authorized to conduct business in the State of New Mexico and who is approved in federal circular 570 as published by the U.S. Treasury Department. The cost of the bonds shall be included in the bid.
34. **TIME OF DELIVERY AND FORM OF BONDS.** The bidder shall deliver the required bonds to the County no later than seven (7) days following the date of execution of the contract. If the Work is to be commenced prior thereto in response to a letter of intent, the bidder shall, prior to commencement of the Work, submit evidence satisfactory to the County that such bonds will be furnished and delivered in accordance with this section.  
  
The bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.
35. **WARRANTY:** The contractor shall furnish a written warranty of workmanship to the Procurement Manager for a period of one (1) year following the completion date in addition to all other warranties required by the Contract Documents.
36. **NOTICE OF AWARD:** A written Notice of Award shall be issued by the County after review and approval of the bid and related documents.
37. **IDENTICAL BIDS:** If two or more identical low bids are received, the County will apply the process described at Section 13.1.110 NMSA 1978, of the State Procurement Code.
38. **CANCELLATION OF AWARD:** When in the best interest of the public, the County may cancel the award of any contract at any time before the execution of said contract by all parties without any liability against the County.
39. **NOTICE TO PROCEED:** The County will issue a written Notice to Proceed and a purchase order to the contractor stipulating the date from which contract time will be charged and the date contract time is to expire.
40. **FAILURE TO EXECUTE CONTRACT:** Failure to return the signed contract with acceptable contract bonds and certificate of insurance within ten (10) calendar days after

the date of the Notice of Award shall be just cause for the cancellation of the award. The award may then be made to the next lowest responsible bidder, or the work may be re-advertised and constructed under contract or otherwise, as the owner may decide.

41. **INSURANCE REQUIREMENTS:** At a minimum upon execution of the Agreement between the County and the contractor, the contractor shall furnish to the County, Certificates of Insurance naming Santa Fe County as an additional insured for the insurance coverage as specified in the sample contract and the exhibit to the contract.
42. **CLARIFICATION OF NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR, AND CERTIFICATION OF SUBCONTRACTOR REGARDING EQUAL EMPLOYMENT OPPORTUNITY:** The general contractor is not required to present completed "Non-Collusion Affidavit of Subcontractor" and "Certification of Subcontractor Regarding Equal Employment Opportunity" forms from their subcontractors at the time of bid submittal; however, once the contract is awarded, the general contractor is responsible for providing these forms along with the bonds and certificate of insurance.
43. **SUBCONTRACTOR PERFORMANCE AND PAYMENT BOND.** A subcontractor whose work to be performed on a public works building project is one hundred twenty-five thousand dollars (\$125,000.) or more shall submit a performance and payment bond in the amount of the work they are to perform on the project. These bonds will be submitted within the stated (10) calendar days after the date of the Notice to Award.
44. **OPERATIONS AND MAINTENANCE MANUALS:** At the completion of the project but prior to the Substantial Completion certificate approved by the engineer, the contractor shall submit to the architect two (2) copies of a three ring binder with all maintenance and operations instructions for all systems and items within this phase of construction, if applicable.
45. **NOTICE:** The Procurement Code, Sections 13-1-28 through 13-1-199 NMSA 1978, imposes civil and misdemeanor criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities, and kick backs.
46. **SUFFICIENT APPROPRIATION:** Any contract awarded as a result of this IFB process may be terminated if sufficient appropriations or authorizations do not exist. Such termination will be effected by sending written notice to the contractor. The County's decision as to whether sufficient appropriations and authorizations are available will be accepted by the contractor as final.
47. **NUMBER OF BIDS ACCEPTED:** Bidders shall submit only one (1) bid in response to this IFB.
48. **DOUBLE-SIDED DOCUMENTS:** All submitted bids/proposal documents shall be double-sided, pursuant to Santa Fe County Resolution 2013-7, Adopting Sustainable Resource Management Principles, Section 2. A. Waste Reduction and Reuse..."all documents are to

be double-sided, including those that are generated by outside entities using County funds and by consultants and contractors doing business with the County”.

49. LIVING WAGE: Contractor shall comply with the requirements of Santa Fe County Ordinance 2014-1 (Establishing a Living Wage) as amended by 2014-5.

**THIS SECTION INTENTIONALLY LEFT BLANK**

**BID PROPOSAL**  
**IFB# 2017-0262-PW/KE**  
**Construction Services for the**  
**Santa Fe Mountain Center**

To Santa Fe County, State of New Mexico, Owner:

In compliance with the Information for Bidders and in strict conformance with the Contract Documents, \_\_\_\_\_, hereinafter called the Bidder, organized and existing under the laws of the State of New Mexico as a \_\_\_\_\_ (type of business or legal entity), hereby proposes to perform all the WORK required for the construction services for the Santa Fe Mountain Center located in Santa Fe County, New Mexico.

The undersigned declares that it is the only person or parties interested in the proposal as principals are those named herein; that the proposal is made without collusion with any person, firm or corporation; that it has carefully examined the specifications, including special provisions, if any, and that it has made a personal examination of the site of the work, that it is to furnish all the necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials specified in the manner and the time prescribed; that it understands that the quantities are approximate only and subject to increase or decrease, and that it is willing to perform any increased or decreased quantities of work at unit price bid.

The undersigned hereby agrees to execute and deliver the Construction Agreement within ten (10) days, or such further time as may be allowed in writing by Santa Fe County after receiving notification of the acceptance of this proposal, and it is hereby mutually understood and agreed that in case we do not, Santa Fe County may proceed to award the contract to others.

We hereby agree to commence the work within fifteen (15) days, or such further time as may be allowed in writing by Santa Fe County after notification to proceed.

The undersigned proposes to guarantee all work performed under these plans, specifications and contract for one year after acceptance by the County and repair and maintain same until the date of acceptance by Santa Fe County.

\_\_\_\_\_  
Signature-Title

(Corporate Seal)

\_\_\_\_\_  
Corporate Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip Code

Names of individual members of  
firms or names and titles of all  
officers of Corporation.

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Corporation organized under  
the Laws of the State of

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New Mexico Contractor's License No.

NM Department of Workforce Solutions,  
Public Works Labor Enforcement Fund  
Registration Number:

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**SANTA FE COUNTY  
BID FORM**

FROM: \_\_\_\_\_

\_\_\_\_\_ hereinafter called "Bidder".

TO: Santa Fe County  
142 West Palace Avenue  
Santa Fe, New Mexico 87501

hereinafter called "CONTRACTING AGENCY",

BID FOR: **IFB# 2017-0262-PW/KE**  
PROJECT: **Construction Services for Santa Fe Mountain Center**

Purchasing Division:

The bidder has familiarized itself with the existing conditions on the project area affecting the cost of the work and with the contract documents which includes:

- A. Advertisement for Bids
- B. Instructions for Bidders
- C. Bid Proposal and other required bid forms as listed herein
- D. Form of Agreement
- E. Form of Performance Bond
- F. Form of Labor and Material Payment Bond
- G. Technical Specifications
- H. All information provided in the Project Manual and Drawings

Therefore, the Bidder hereby proposes to furnish all supervision, technical personnel, labor, materials, tools appurtenances, equipment, and services (including all utility and transportation services) required to complete the Construction Services to remodel the Santa Fe Mountain Center, in accordance with the above listed documents.

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern). Bidder has provided unit prices for the scope of work.

In submitting this bid, the Bidder understands that the right is reserved by Santa Fe County to reject any irregular or all bids, waive any technicalities in the bids, and accept the bid deemed to be in the best interest of the public and that Santa Fe County intends to award one contract (if at all) for the items bid. If written notice of the acceptance of this bid is mailed, telegraphed or otherwise delivered to the undersigned within ninety (90) days after the opening thereof or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver the agreement in the prescribed form within ten (10) days after the agreement is presented to it for signature.

All Addenda pertaining to this Project shall be acknowledged by the Bidder in the spaces provided below:

Addendum No.                      Date	Acknowledged by Bidder or Its Authorized Representative	Date Acknowledged
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Failure to acknowledge receipt, as provided above, may be considered sufficient grounds for disqualification of the bidder and rejection of his proposal.** It shall be the bidder's responsibility to become fully advised of all Addenda prior to submitting his bid.

The Bidder agrees to commence work under this Contract within fifteen (15) days after, a date to be specified in a written "Notice to Proceed" from Santa Fe County or its authorized agents. Bidder further agrees to pay liquidated damages as provided in the Contract Documents.

This Bid Proposal contains the following:

- A. Bid Proposal
- B. Bid Form
- C. Bid Sheet(s)
- D. Non-Collusion Affidavit for Prime Bidder
- E. Certification of Non-segregated Facilities
- F. Certification of Bidder Regarding Equal Employment Opportunity
- G. Bid Bond
- H. Subcontractors Listing (as included in this packet)
- I. Campaign Contribution Disclosure Form
- J. Preference Certificate(s)

Respectfully submitted:

Name of Bidder: \_\_\_\_\_

Official Address: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

\*New Mexico Contractor's License Number and Types: \_\_\_\_\_

United States Treasury Number: \_\_\_\_\_

Resident Preference Certificate Number: \_\_\_\_\_

**BID SHEETS  
BID ITEMS FOR THE  
Construction Services for the  
Santa Fe Mountain Center**

Please offer your best price for the work required for construction services for the Santa Fe Mountain Center, in Santa Fe County. The lump sum base bid and two additive alternates must include pricing for materials, equipment, labor, travel, and fees for any required permitting. Be advised that award may be made without discussion with bidders on offers received.

**BASE BID:** Construction Services for the Santa Fe Mountain Center as provided by Architect drawings:

LUMP SUM BASE BID: \$ \_\_\_\_\_  
(WRITTEN IN NUMBERS)

LUMP SUM BASE BID: \_\_\_\_\_  
(WRITTEN IN WORDS)

ADDITIVE ALTERNATE 1: \$ \_\_\_\_\_  
(a furnace and water heater closet on upper level) (WRITTEN IN NUMBERS)

ADDITIVE ALTERNATE 1: \_\_\_\_\_  
(a furnace and water heater closet on upper level) (WRITTEN IN WORDS)

ADDITIVE ALTERNATE 2: \$ \_\_\_\_\_  
(a storage closet in office 1 and 3 on upper level) (WRITTEN IN NUMBERS)

ADDITIVE ALTERNATE 2: \_\_\_\_\_  
(a storage closet in office 1 and 3 on upper level) (WRITTEN IN WORDS)

**NON-COLLUSION AFFIDAVIT OF PRIME BIDDER**

STATE OF NEW MEXICO

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, deposes and says that:

(1) They are the \_\_\_\_\_ of \_\_\_\_\_ the Bidder that has submitted the attached Bid Proposal;

(2) They are fully informed respecting the preparation and contents of the attached Bid Proposal and of all pertinent circumstances respecting such bid;

(3) Such bid is genuine and is not a collusive or sham bid;

(4) Neither the said bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communications or conference with any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Contracting Agency or any person interested in the proposed contract; and

(5) The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(SIGNED) \_\_\_\_\_

TITLE \_\_\_\_\_

SUBSCRIBED AND SWORN to before me this \_\_\_\_ day of \_\_\_\_\_ 2017.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires \_\_\_\_\_

**NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR**

STATE OF NEW MEXICO

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, deposes and says that:

(1) It is the \_\_\_\_\_ of \_\_\_\_\_, hereinafter referred to as the "Subcontractor".

(2) It is fully informed respecting the preparation and contents of the Subcontractor's proposal submitted by the Subcontractor to \_\_\_\_\_, the Contractor, for certain work in connection with the \_\_\_\_\_ contract pertaining to the \_\_\_\_\_ project in \_\_\_\_\_.

(3) Such Subcontractors proposal is genuine and is not a collusive or sham proposal.

(4) Neither the Subcontractor nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communications or conference with any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Contracting Agency or any person interested in the proposed contract; and

(5) The price or prices quoted in the Subcontractor's proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(SIGNED) \_\_\_\_\_

TITLE \_\_\_\_\_

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_ day of \_\_\_\_\_ 2017.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

**SUBCONTRACTS**

- A. The contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this contract until it has submitted a Non-Collusion Affidavit from the subcontractor, is substantially the form shown below, and has received written approval of such subcontractor from Santa Fe County.

- B. No proposed subcontractor shall be disapproved by Santa Fe County except for cause.
- C. The contractor shall be as fully responsible to Santa Fe County for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by them.
- D. The contractor shall cause appropriate provision to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the contract for the improvements embraced.
- E. Nothing contained in the contract shall create any contractual relation between any subcontractor and Santa Fe County.

**THIS SECTION INTENTIONALLY LEFT BLANK**

**CERTIFICATION OF NON-SEGREGATED FACILITIES**

(Applicable to construction contracts and related subcontracts exceeding \$10,000, which are not exempt from the Equal Opportunity Clause).

The construction contractor certifies that it does not maintain or provide for its employees any segregated facility at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The construction contractor certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting room, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clock, locker rooms and other storage or dressing areas, parking lots, drinking foundations, recreating or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. The construction contractor agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed SUBCONTRACTORS prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that it will retain such certifications in its files.

SIGNED: \_\_\_\_\_

TITLE: \_\_\_\_\_

SUBSCRIBED AND SWORN to before me this \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_

NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

**CERTIFICATION OF BIDDER REGARDING  
EQUAL EMPLOYMENT OPPORTUNITY**

**INSTRUCTIONS**

This certification is required pursuant to Executive Order 11246 (30 F. R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract or subcontract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

---

**CERTIFICATION OF BIDDER**

Bidder's Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.  
  
Yes \_\_\_\_ No \_\_\_\_
2. Compliance reports were required to be filed in connection with such contract or subcontract.  
  
Yes \_\_\_\_ No \_\_\_\_

---

Certification -- The information above is true and complete to the best of my knowledge and belief.

---

NAME AND TITLE OF SIGNER (PLEASE TYPE)

---

SIGNATURE

---

DATE



**CERTIFICATION OF SUBCONTRACTOR REGARDING  
EQUAL EMPLOYMENT OPPORTUNITY**

**INSTRUCTIONS**

This certification is required pursuant to Executive Order 11246 (30 F. R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract or subcontract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

---

**CERTIFICATION OF SUBCONTRACTOR**

Subcontractor's Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

1. Subcontractor has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.  
  
Yes \_\_\_\_ No \_\_\_\_
2. Compliance reports were required to be filed in connection with such contract or subcontract.  
  
Yes \_\_\_\_ No \_\_\_\_

---

Certification -- The information above is true and complete to the best of my knowledge and belief.

---

NAME AND TITLE OF SIGNER (PLEASE TYPE)

---

SIGNATURE

---

DATE

**BID BOND**

A. KNOW ALL MEN BY THESE PRESENT, THAT WE \_\_\_\_\_ hereinafter called the PRINCIPAL, as PRINCIPAL and the \_\_\_\_\_, of \_\_\_\_\_ a Corporation duly organized under the laws of the State of \_\_\_\_\_, and authorized to do business in the State of New Mexico, hereinafter called the SURETY, as SURETY are held and firmly bound unto Santa Fe County, a Municipal Corporation, hereinafter called the OBLIGEE, in the sum of \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_) for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly be these presents.

WHEREAS, the Principal has submitted the accompanying bid, dated \_\_\_\_\_, 2017, for the Construction Services for the Santa Fe Mountain Center.

B. NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond of bonds as may be specified in the bidding of Contract Documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof of in the event of the failure of the Principal to enter such contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party of perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

C. SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2017.

\_\_\_\_\_  
BIDDER

By: \_\_\_\_\_  
PRINCIPAL

(SEAL)

\_\_\_\_\_  
WITNESS

By: \_\_\_\_\_  
SURETY

\_\_\_\_\_  
WITNESS

Title: \_\_\_\_\_

**PERFORMANCE BOND**

A. KNOW ALL MEN BY THESE PRESENT, THAT WE \_\_\_\_\_, as PRINCIPAL hereinafter called the "CONTRACTOR" and \_\_\_\_\_, as SURETY hereinafter called the "SURETY", are held and firmly bound unto OBLIGEE Santa Fe County, a Political Subdivision of the State of New Mexico, hereinafter called the "COUNTY", in the sum of \_\_\_\_\_ (\$\_\_\_\_\_) dollars for the payment whereof CONTRACTOR and SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

B. WHEREAS, the CONTRACTOR has a written contract dated \_\_\_\_\_, 2017, with the COUNTY for the Construction Services for the Santa Fe Mountain Center located in Santa Fe County, New Mexico, in accordance with drawings and specifications which contract is referenced made part hereof, and is hereinafter referred to as the "Contract."

C. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly and faithfully perform said Contract (including any amendment thereto), then this obligation shall be null and void; otherwise it shall remain in full force and effect until the COUNTY shall by written instrument notify the SURETY that the obligation is discharged, except that the obligation shall continue for at least three (3) months following the expiration of the term of the Contract.

1. The SURETY hereby waives notice of any alteration or extension of the Contract time made by the COUNTY.
2. Whenever CONTRACTOR shall be, and is declared by the COUNTY to be in default under the Contract, the COUNTY having performed the COUNTY'S obligations thereunder, the SURETY must promptly remedy the default and shall promptly:
  - (1) Complete the Contract in accordance with its terms and conditions, or
  - (2) Obtain a bid or bids for submission to the COUNTY for completing the Contract in accordance with its terms and conditions, and upon determination by the COUNTY and SURETY of the lowest responsible bidder, arrange for a contract between such bidder and Santa Fe County, and make available as work progresses (even though there should be a default or a secession of defaults under the Contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price, but not exceeding, including other costs and damages for which the SURETY may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price" as used in this paragraph, shall mean the total amount payable by the COUNTY to CONTRACTOR under the Contract and any amendments thereto, less the amount properly paid by the COUNTY to CONTRACTOR.

D. No right of action shall accrue on this Performance Bond to or for the use of any person or corporation other than Santa Fe County named herein or the heirs, executors, administrators, or successors of Santa Fe County.

E. This Bond shall be enforceable without the need to have recourse to any judicial or arbitral proceedings.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2017.

\_\_\_\_\_  
CONTRACTOR – PRINCIPAL (signature)

By: \_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC (seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY (signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC (seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY'S Authorized New Mexico Agent

**LABOR AND MATERIAL PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENT, THAT WE \_\_\_\_\_

\_\_\_\_\_ as PRINCIPAL hereinafter called the "PRINCIPAL" and \_\_\_\_\_ as SURETY hereinafter called the "SURETY", are held and firmly bound unto Santa Fe County, a Political Subdivision of the State of New Mexico as OBLIGEE hereinafter called the "COUNTY", for the use and benefit of any claimants as herein below defined, in the amount of \_\_\_\_\_ (\$ . ) dollars for the payment whereof PRINCIPAL and SURETY bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the PRINCIPAL has a written contract dated \_\_\_\_\_, 2017, with the COUNTY for the Construction Services for the Santa Fe Mountain Center located in Santa Fe County, New Mexico, which must be constructed in accordance with drawings and specifications which contract is referenced and made a part hereof, and is hereinafter referred to as the "Contract."

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if PRINCIPAL shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect, subject to the following conditions:

1. A claimant is defined as one having a direct contract with the PRINCIPAL or with a subcontractor of the PRINCIPAL for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include but not be limited to that part of water, gas, power, light, heat, oil, gasoline, telephone services or rental of equipment directly applicable to the Contract.
2. The above named PRINCIPAL and SURETY hereby jointly and severally agree with the COUNTY that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, prosecute a suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereof. The COUNTY shall not be liable for payment of any cost or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
  - a. Unless claimant, or other than one having a direct contract with the PRINCIPAL, shall have written notice in the form of an sworn statement to the COUNTY and any one or both of the following: the PRINCIPAL or SURETY above named, within ninety (90) days after such said claim is made or suit filed, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed.
  - b. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the COUNTY, PRINCIPAL or SURETY, at any place where an office is regularly maintained by said COUNTY, PRINCIPAL or SURETY for the transaction of business, or served in any manner in which legal process may be served in the State in which the aforesaid project is located, save that such service need not be made by a public officer.

4. Any suit under this Labor and Material Bond must be instituted in accordance with the statute of limitation under Section 37-1-3 NMSA 1978.
5. No right of action shall accrue on this Bond to or for the use of any person or corporation other than subcontractors or sub-subcontractors of the said Contract between PRINCIPAL and Santa Fe County named herein.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2017.

\_\_\_\_\_  
CONTRACTOR – PRINCIPAL (signature)

By: \_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC

(seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY (signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC

(seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY'S Authorized New Mexico Agent

**SUBCONTRACTOR LISTING**

1. To be fully executed and included with Bid as a condition of the Bid (13-4-31 through 13-4-42 NMSA 1978).
2. For the purposes of this Project the threshold shall be \$5,000.
3. The Bidder shall list the Subcontractor's Name, the City or County of the Place of Business and the Category of Work that will be done by each Subcontractor

Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		

Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		



Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		
Trade:	Name of Subcontractor:	
Address:		
Telephone No:	License No:	NM Dept. of Workplace Solutions Registration No.
Signature of Subcontractor (To be obtained after award of contract):		

**APPENDIX A****ACKNOWLEDGEMENT OF RECEIPT OF INVITATION FOR BIDS FORM  
IFB# 2017-0262-PW/KE**

In acknowledgement of receipt of this Invitation for Bids the undersigned agrees that he/she has received a complete copy, beginning with the title page, and ending with the contractual documents. Completed forms must be submitted to **Karen K. Emery** no later than **April 12, 2017** to receive any addenda for this solicitation.

Only Bidders that return this form in a timely manner will receive copies of addenda to this IFB.

FIRM: \_\_\_\_\_  
REPRESENTED BY: \_\_\_\_\_  
TITLE: \_\_\_\_\_  
PHONE NO.: \_\_\_\_\_  
FAX NO.: \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_  
MAILING ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
DELIVERY ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)  
Name: \_\_\_\_\_  
(Printed)  
Title: \_\_\_\_\_

This name and address will be used for all correspondence related to the Invitation For Bids.

Karen K. Emery  
Santa Fe County  
Purchasing Division  
142 W. Palace Avenue  
Santa Fe, NM 87504  
Phone: (505) 992-6759 Fax: (505) 989-3243  
E-mail: [kkemery@santafecountynm.gov](mailto:kkemery@santafecountynm.gov)

## APPENDIX B

### CAMPAIGN CONTRIBUTION DISCLOSURE

Pursuant to the Procurement Code, Sections 13-1-28, et seq., NMSA 1978 and NMSA 1978, § 13-1-191.1 (2006), as amended by Laws of 2007, Chapter 234, any prospective contractor seeking to enter into a contract with any state agency or local public body **for professional services, a design and build project delivery system, or the design and installation of measures the primary purpose of which is to conserve natural resources** must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body may cancel a solicitation or proposed award for a proposed contract pursuant to Section 13-1-181 NMSA 1978 or a contract that is executed may be ratified or terminated pursuant to Section 13-1-182 NMSA 1978 of the Procurement Code if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

The state agency or local public body that procures the services or items of tangible personal property shall indicate on the form the name or names of every applicable public official, if any, for which disclosure is required by a prospective contractor.

**THIS FORM MUST BE INCLUDED IN THE REQUEST FOR PROPOSALS AND MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.**

The following definitions apply:

**“Applicable public official”** means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

**“Campaign Contribution”** means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made

to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to statewide or local office. "Campaign Contribution" includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

**"Family member"** means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law of (a) a prospective contractor, if the prospective contractor is a natural person; or (b) an owner of a prospective contractor.

**"Pendency of the procurement process"** means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

**"Prospective contractor"** means a person or business that is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person or business qualifies for a sole source or a small purchase contract.

**"Representative of a prospective contractor"** means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

Name(s) of Applicable Public Official(s) if any: \_\_\_\_\_  
(Completed by State Agency or Local Public Body)

**DISCLOSURE OF CONTRIBUTIONS BY PROSPECTIVE CONTRACTOR:**

Contribution Made By: \_\_\_\_\_

Relation to Prospective Contractor: \_\_\_\_\_

Date Contribution(s) Made: \_\_\_\_\_  
\_\_\_\_\_

Amount(s) of Contribution(s) \_\_\_\_\_  
\_\_\_\_\_

Nature of Contribution(s) \_\_\_\_\_  
\_\_\_\_\_

Purpose of Contribution(s) \_\_\_\_\_  
\_\_\_\_\_

(Attach extra pages if necessary)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title (position)

**--OR--**

**NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE** to an applicable public official by me, a family member or representative.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title (Position)

## APPENDIX C

### Resident Veterans Preference Certification

\_\_\_\_\_ (NAME OF CONTRACTOR) hereby certifies the following in regard to application of the resident veterans' preference to this procurement.

**Please check one box only:**

☐ I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is less than \$1M allowing me the 10% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

☐ I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$1M but less than \$5M allowing me the 8% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

☐ I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$5M allowing me the 7% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

"I agree to submit a report or reports to the State Purchasing Division of the General Services Department declaring under penalty of perjury that during the last calendar year starting January 1 and ending on December 31, the following to be true and accurate:

"In conjunction with this procurement and the requirements of this business application for a Resident Veteran Business Preference/Resident Veteran Contractor Preference under Sections 13-1-21 or 13-1-22 NMSA 1978, which awarded a contract which was on the basis of having such veterans preference, I agree to report to the State Purchasing Division of the General Services Department the awarded amount involved. I will indicate in the report the award amount as a purchase from a public body or as a public works contract from a public body as the case may be."

"I understand that knowingly giving false or misleading information on this report constitutes a crime".

I declare under penalty of perjury that this statement is true to the best of my knowledge. I understand that giving false or misleading statements about material fact regarding this matter constitutes a crime.

\_\_\_\_\_  
(Signature of Business Representative)\*

\_\_\_\_\_  
(Date)

\*Must be an authorized signatory of the Business.

The representations made in checking the boxes constitutes a material representation by the business that is subject to protest and may result in denial of an award or un-award of the procurement involved if the statements are proven to be incorrect.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2017.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:

\_\_\_\_\_

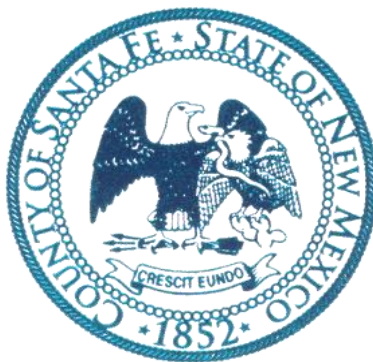
**APPENDIX D**

**Sample Construction Contract  
(As Follows)**



## SAMPLE OF COUNTY CONTRACT

### AGREEMENT BETWEEN SANTA FE COUNTY AND CONTRACTOR FOR CONSTRUCTION SERVICES FOR THE EDGEWOOD FIRE STATION #2 ADA AND CODE COMPLIANCE



#### SANTA FE COUNTY ADMINISTRATIVE SERVICES DEPARTMENT PURCHASING DIVISION 2014 EDITION

[Changes, additions, deletions and/or any modifications other than those agreed upon by the parties upon execution of this contract, without the written consent of Santa Fe County shall render this document null and void.]

Hereafter "County":

Katherine Miller, County Manager  
Santa Fe County  
PO Box 276  
Santa Fe, New Mexico 87504-0276  
TELEPHONE: 505-986-6200  
FAX: 505-995-2740

Hereafter "Contractor":

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
TELEPHONE: \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_

ARCHITECT [or ENGINEER]

NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
TELEPHONE: \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_

# Table of Contents

		Page No
<b>RECITALS .....</b>		<b>10</b>
Article 1	The Contract Documents .....	10
1.1	Documents .....	10
1.2	Certificates and Documentation.....	10
Article 2	The Work .....	11
<b>2.1</b>	<b>The Work.....</b>	<b>11</b>
Article 3	Effective Date, Time of Commencement, Substantial Completion and Amendments .....	11
3.1	Effective Date .....	11
3.2	Time of Commencement.....	11
3.3	Substantial Completion .....	11
3.4	Time for Completion and Liquidated Damages.....	12
3.5	Amendments .....	13
Article 4	Contract Sum .....	13
4.1	Lump Sum.....	13
4.2	Contract Amount.....	13
Article 5	Progress Payments .....	14
5.1	Progress Payments .....	14
Article 6	Final Payment .....	15
6.1	Final Payment .....	15
6.2	Acceptance of Final Payment Constitutes Release.....	15
<b>GENERAL CONDITIONS</b>		
1.	Definitions.....	17
1.1	Application for Payment .....	17
1.2	Change Order .....	17
1.3	Calendar Day .....	17
1.4	Contract Period .....	17

1.5	Contractor .....	17
1.6	Construction Documents.....	17
1.7	Construction Schedule .....	17
1.8	Day .....	17
1.9	Labor and Material Payment Bond .....	17
1.10	Lump Sum Agreement.....	18
1.11	Lump Sum Bid.....	18
1.12	Lump Sum Contract.....	18
1.13	Payment Bond .....	18
1.14	Performance Bond .....	18
1.15	Progress Payment.....	18
1.16	Progress Schedule .....	18
1.17	Punch List .....	18
1.18	Schedule of Values .....	18
1.19	Services .....	18
1.20	Stipulated Sum Agreement .....	19
1.21	Subcontractor .....	19
1.22	Unit Price Contract .....	19
1.23	Unit Prices.....	19
1.24	Working Day.....	19
1.25	Work on the Project .....	19
2.	Contract and Contract Documents .....	19
2.1	Entire Agreement .....	19
2.2	Relationship of Contract Documents .....	19
2.3	Conflicting Conditions.....	19
3.	Plans, Specifications and Addenda .....	20
3.1	The plans, specifications and addenda.....	20
3.2	Certificates and Documents Incorporated.....	20
4.	Contract Security - Bonds .....	20
4.1	Performance Bond .....	20
4.2	Payment Bond .....	20
4.3	Additional or Substitute Bond .....	20
4.4	Labor and Material Bond .....	20
5.	Terms and Meanings.....	20
5.1	Words and Phrases .....	21
5.2	Gender, Singular/Plural.....	21
5.3	Captions & Section Headings .....	21
5.4	Interchangeable Terms.....	21

6.	Compliance with Applicable Law, Choice of Law .....	21
6.1	Agreement governed by the laws of the State of New Mexico .....	21
6.2	Contractor shall comply with all applicable laws, ordinances & regulations .....	21
6.3	Minimum Wage Rate .....	21
6.4	Litigation shall be federal and state district courts of New Mexico .....	21
6.5	Bribes, Kickbacks and Gratuities.....	21
6.6	New Mexico Tort Claims Act.....	21
6.7	Provision Required by Law Deemed Inserted .....	22
7.	Effective Date & Term.....	22
7.1	Agreement shall become effective.....	22
7.2	Substantial Completion.....	2
8.	Termination.....	22
8.1	Termination of Agreement for Cause .....	23
8.2	Termination for Convenience .....	23
8.3	Right of the County to Terminate Contract .....	23
9.	Appropriations & Authorizations .....	23
10.	Amendments – Change Orders .....	23
11.	Indemnification .....	23
11.1	Contractor shall indemnify .....	23
11.2	County shall have right to control and participate in defense of demand or suit .....	24
11.3	Contractor’s obligations shall not be limited by provisions of insurance policy .....	24
12.	Aggrievement Procedure During Contract Administration .....	24
12.1	Claims, Disputes or other matters.....	24
12.2	Settlement Agreement.....	24
12.3	Contractor shall carry on Work during dispute resolution proceedings .....	24
13.	Dispute Resolution.....	24
13.1	Mediation .....	24
13.2	Mediation Process .....	24
13.3	Litigation.....	25
14.	Insurance .....	25
14.1	Insurance required before contractor commences work .....	2
14.2	Proof of Carriage of Insurance.....	25
14.3	General Conditions .....	25
14.4	General Liability Insurance, including automobile .....	25

14.5	Subcontractor's Public Liability & Property Damage Insurance .....	25
14.6	Worker's Compensation Insurance.....	25
14.7	Scope of Insurance and Special Hazards .....	26
14.8	Builder's Risk Insurance.....	26
14.9	Increased Limits.....	26
14.10	Additional Insured .....	26
15.	Independent Contractor.....	26
15.1	Contractor and its agents are independent contractors .....	26
15.2	Contractor shall not subcontract without written approval .....	27
15.3	Contractor shall maintain detailed time records .....	27
16.	Conflict of Interest of Officers or Employees of the Local Jurisdiction.....	27
16.1	No officer or employee shall have any interest shall have any interest.....	27
16.2	No official of the County shall be interested personally in this contract.....	27
16.3	Contractor warrants no conflict of interest .....	27
17.	Assignment .....	27
17.1	Contractor shall not assign or transfer any interest in this Agreement .....	27
18.	Subcontracting .....	28
18.1	Contractor shall not subcontract without written notice to County .....	28
18.2	Contractor shall provide listing of subcontractors .....	28
18.3	Contractor shall adhere to all provisions of Subcontractor's Fair Practices Act.....	28
18.4	Contractor shall provide Non-Collusion and EEO forms for all subcontractors .....	28
18.5	Contractor shall not award any work without written notice to County .....	28
18.6	Contractor shall be responsible for acts and omissions of subcontractors.....	28
18.7	Contractor shall cause appropriate provisions in all subcontracts .....	28
18.8	Nothing shall create contractual relation between County and subcontractors .....	28
18.9	New Mexico Little Miller Act .....	28
19.	Personnel.....	29
19.1	All work performed by Contractor .....	29
19.2	Contractor shall secure all qualified personnel required to perform work .....	29
20.	Notices .....	29
20.1	Notice required shall be in writing.....	29
20.2	Nothing shall preclude the giving of written Notice .....	29
21.	Release .....	29

22.	Waiver.....	29
-----	-------------	----

## CONDITIONS OF THE WORK

1.	Additional Instructions & Detail Drawings .....	31
1.1	Additional instructions & drawings as necessary .....	31
2.	Shop or Setting Drawings .....	31
2.1	Contractor shall submit copies of shop or setting drawing.....	31
3.	Materials, Services and Facilities .....	31
4.	Contractor's Title to Materials.....	31
4.1	No materials or supplies shall be purchased by subject to chattel mortgage .....	31
5.	Inspection and Testing of Materials.....	32
5.1	All material and equipment shall be subject to adequate inspection .....	32
5.2	Materials of construction shall be subject to inspection and testing.....	32
6.	"Or Equal" Clause.....	32
6.1	To establish a standard.....	32
7.	Patents .....	32
7.1	Patented or Unpatented Invention.....	32
7.2	License or Royalty Fees .....	32
7.3	Copyrighted Design .....	32
8.	Surveys, Permits and Regulations.....	33
8.1	County will furnish all surveys .....	33
8.2	Contractor shall procure and pay all permits, licenses and approvals .....	33
8.3	Contractor shall comply with all laws, ordinances, rules orders & regulations .....	33
9.	Contractor's Obligations .....	33
9.1	Contractor shall perform all work and furnish all materials, equipment, machinery .....	33
9.2	Contractor shall complete entire work.....	33
10.	Weather Conditions .....	33
10.1	Temporary suspension of Work.....	33
11.	Protection of Work and Property - Emergency.....	34
11.1	Contractor shall safeguard County's property .....	34
11.2	Emergency which threatens loss or injury of property .....	34
11.3	Contractor shall act as instructed or authorized.....	34
11.4	Reimbursement claimed by Contractor .....	34

12.	Inspection.....	34
12.1	County shall be permitted to inspect all work, materials, payrolls, records .....	34
13.	Reports, Records and Data.....	34
13.1	Contractor shall submit to County schedules, payrolls, reports, estimates.....	34
14.	Superintendent by Contractor .....	34
14.1	Contractor shall employ a construction superintendent.....	34
15.	Changes in Work.....	35
15.1	No changes in Work without written approval .....	35
16.	Extras .....	35
16.1	County may order extra Work .....	35
17.	Inspection of Services .....	35
17.1	Contractor shall provide inspection system .....	35
17.2	County has the right to inspect and test all services .....	35
17.3	Contractor shall furnish all reasonable facilities and assistance .....	35
17.4	If any services do not conform with Contract requirements .....	36
17.5	County may perform the services and charge Contractor.....	36
18.	Correction of Work .....	36
18.1	Work shall be made good if failure to meet County approval .....	36
19.	Warranty of Construction .....	36
19.1	Warrants that Work conforms with Contract requirements .....	36
19.2	One year warranty.....	36
19.3	Contractor shall remedy any failure to conform .....	36
19.4	Contractor shall restore any Work damaged.....	37
19.5	County shall notify Contractor of any failure, defect or damage .....	37
19.6	If Contractor fails to remedy .....	37
19.7	Contractor shall obtain all warranties, executed in writing .....	37
19.8	Contractor's warranty has expired .....	37
19.9	Defect in County furnished material or design .....	37
19.10	County's rights under the Inspection and Acceptance Clause.....	37
20.	Subsurface Conditions Found Different .....	37
20.1	Subsurface conditions materially differing from plans and specifications .....	37
21.	Claims for Extra Cost.....	37
21.1	No claim for extra work or cost .....	37
22.	Construction Schedule and Periodic Estimates.....	38
22.1	Estimated construction progress schedule .....	38

22.2	Progress Schedule .....	38
23.	Assignments .....	38
23.1	Contractor shall not assign.....	38
24.	Mutual Responsibility of Contractors .....	38
24.1	Acts of Negligence.....	38
25.	Separate Contract .....	39
25.1	Coordination with other contractors .....	39
26.	Architect/Engineer's Authority.....	39
26.1	Orders & Directions to execution of the Work .....	39
26.2	Decisions concerning meaning and intent .....	39
27.	Stated Allowances.....	39
27.1	Contract sum for all allowances.....	39
28.	Use of Premises and Removal of Debris .....	40
28.1	Contractor undertakes at own expense .....	40
29.	Quantities of Estimate.....	40
29.1	Increase and decrease of estimated quantities .....	40
30.	Lands and Right-of-Way.....	40
30.1	County shall obtain all lands and rights-of way.....	40
31.	General Guaranty .....	40
31.1	Work not done in accordance with contract documents .....	40
32.	Protection of Lives and Health .....	41
32.1	Protection of persons and property .....	41
33.	Interest of Member.....	41
33.1	BCC shall not have any share or interest .....	41
34.	Other Prohibited Interests .....	41
34.1	No County official or others to be personally interested in Contract .....	41
35.	Use & Occupancy Prior to Acceptance by County.....	41
35.1	Partial Occupancy by County .....	41
	Attachment A      Bid Sheets .....	42
	Attachment B      Addenda and Modifications.....	43
	Exhibit A          Project Manual .....	44
	Exhibit B          Technical Specifications .....	45



Exhibit C	Labor and Material Payment Bond .....	46
Exhibit D	Performance Bond .....	48
Exhibit E	Assignment of Antitrust Claims.....	50
Exhibit F	Certificate of Liability Insurance .....	51
Exhibit G	Notice of Contract Award.....	52
Exhibit H	Notice to Proceed .....	53
Exhibit I	Change Order) .....	54
Exhibit J	Certificate of Substantial Completion .....	56

## **RECITALS**

**WHEREAS**, in accordance with Section 13-1-103 through Section 13-1-110 NMSA 1978, the County issued Invitation for Bid (IFB) No. 2017-0262-PW/KE for construction services for the remodel of the Santa Fe Mountain Center; and

**WHEREAS**, the Contractor submitted its bid, dated April 27, 2017 in response to IFB No. 2017-0262-PW/KE; and

**WHEREAS**, the County is authorized to enter into a construction contract for the Project pursuant to Sections 13-1-100, NMSA 1978; and

**WHEREAS**, the Contractor hereby represents that it is a licensed contractor of the State of New Mexico pursuant to Chapter 60, Article 13 NMSA 1978; and

**WHEREAS**, the Owner agrees to hire the Contractor, and the Contractor agrees to provide Construction Services as required herein for the Project in accordance with the terms and conditions set forth in this Agreement; and

**WHEREAS**, the County requires the services of the Contractor, and the Contractor is willing to provide these services and both parties wish to enter into this Agreement.

## **ARTICLE 1 THE CONTRACT DOCUMENTS**

### **1.1 DOCUMENTS**

The contract documents consist of the following:

-Agreement between County and Contractor	
-General Conditions of the Construction Contract	
-Conditions of the Work of the Construction Contract	
-Bid Sheet	Attachment A
-Addenda and Modifications issued	Attachment B
before and after execution of this Contract	

### **1.2 CERTIFICATES AND DOCUMENTATION**

The following certificates and documentation are hereby attached as exhibits as follows:

Project Manual	Exhibit A
Technical Specifications as listed in Plan Set	Exhibit B
Labor and Material Payment Bond	Exhibit C
Performance Bond	Exhibit D
Assignment of Antitrust Claims	Exhibit E
Certificate of Insurance	Exhibit F
Notice of Award	Exhibit G

Notice to Proceed  
Change Order  
Certificate of Substantial Completion

Exhibit H  
Exhibit I  
Exhibit J

## **ARTICLE 2 THE WORK**

### **2.1 THE WORK**

The Contractor shall perform all the Work required by the Contract Documents for the following:

Insert description of work

## **ARTICLE 3 EFFECTIVE DATE, TIME OF COMMENCEMENT, SUBSTANTIAL COMPLETION AND AMENDMENTS**

### **3.1 EFFECTIVE DATE**

The Effective Date of this Agreement is the date of signature by the County.

### **3.2 TIME OF COMMENCEMENT**

The work to be performed under this Contract shall be commenced no later than ten (10) consecutive calendar days after the date of written Notice to Proceed issued by the County, hereto attached as Exhibit H.

### **3.3 SUBSTANTIAL COMPLETION**

The Contractor shall achieve Substantial Completion of the entire work no later than \_\_\_\_\_ ( ) calendar days from the date of the Notice to Proceed, except as hereafter extended by valid written Change Order. A Certificate of Substantial Completion, attached hereto as Exhibit J, will be issued by the County to the Contractor, as adjusted by any Change Order, attached hereto as Exhibit I.

### **3.4 TIME FOR COMPLETION AND LIQUIDATED DAMAGES**

Should the Contractor neglect, refuse, or otherwise fail to complete the Work within the time specified in this Article, the Contractor agrees that Liquidated Damages in the amount of \_\_\_\_\_ dollars (\$ ) shall be assessed per each calendar day that expires after the date of substantial completion, as adjusted by any change order, and until issuance by the County of a certificate of Substantial Completion in accordance with Paragraph 7 (Effective Date and Term) of the General Conditions.

- A. It is hereby understood and mutually agreed, by and between the Contractor and the County, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are *essential conditions* of this contract and

it is further mutually understood and agreed that the work outlined in this contract shall be commenced on a date to be specified in the "Notice to Proceed."

- B. The Contractor agrees that work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the County, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- C. If the Contractor shall neglect, fail or refuse to complete the work within the time herein specified or any proper extension thereof granted by the County, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the County the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as herein set forth, for each and every calendar day that the contract shall be in default after the time stipulated in the contract for completing the work.
- D. The amount is fixed and agreed upon by and between the Contractor and the County because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the County would in such event sustain, and the amount is agreed to be the amount of damages which the County would sustain and the amount shall be retained from time to time by the County from current periodical estimates.
- E. It is agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided that the Contractor shall not be charged with liquidated damages or any excess cost when the County determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the County. Provided that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:
  - 1. To any preference, priority or allocation order duly issued by the County;
  - 2. To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, or of the public enemy, acts of the County, acts of another contractor in the performance of a contract with the County, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather;
  - 3. To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections above.
- F. Provided further, that the Contractor shall, within ten calendar days from the beginning of such delay, unless the County shall grant a further period of time prior to the date of final settlement of the contract, notify the County in writing of the causes

of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

### 3.5 AMENDMENTS

This Agreement may be amended by mutual agreement by both parties upon issuance of a Change Order by the County to the Contractor. Any such amendment shall be in accordance with Paragraph 10 (Amendments – Change Orders) of the General Conditions. Unless otherwise agreed to by the parties, an amendment shall not affect any outstanding Purchase Order(s) issued by the County prior to the effective date of the amendment.

## ARTICLE 4 CONTRACT SUM

### 4.1 LUMP SUM

The County shall pay the Contractor in current funds for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract Documents, an agreed upon Lump Sum of (enter dollar amount in words) Dollars (\$0.00 enter dollar amount), exclusive of New Mexico gross receipts tax.

### 4.2 CONTRACT AMOUNT

**The Contract sum is determined as follows:**

(insert data from bid form concerning base bid, alternates, etc.)

Base Bid	\$	
List Alternates, if applicable	\$	
	\$	
	\$	
<b>Total Contract Amount</b>	<b>\$</b>	, exclusive of NM grt

## ARTICLE 5 PROGRESS PAYMENTS

### 5.1 PROGRESS PAYMENTS

Based upon an Application for Payment submitted to the County by the Contractor and Certificates for Payment issued by the County, the County shall make progress payments on account of the Contract sum to the Contractor as provided in the Contract documents for the period ending the last day of the month as follows:

- A. No later than 21 working days following receipt by the County of an undisputed Application for Payment, one hundred percent (100%) of the portion of the Contract

Sum properly allocable to labor, materials, and equipment incorporated in the Work and one hundred percent (100%) of the portion of the Contract Sum properly allocable to materials and equipment suitably stored at the site or some other location agreed upon in writing for the period covered by the Application for Payment, less the aggregate of previous payments made by the County; less such amounts as the Architect/ Engineer shall determine for all incomplete Work and unsettled claims as provided in the Contract Documents (Section 57-28-5, NMSA 1978).

- B. When making payments, the County, Contractor or subcontractor shall not retain, withhold, hold back or in any other manner not pay amounts owed for work performed. For additional information regarding retainage and the Prompt Payment Act (refer to Section 57-28-5, NMSA 1978).
- C. Contractors and subcontractors shall make prompt payment to their subcontractors and suppliers for amounts owed for work performed on the construction project within 21 days after receipt of payment from the County, contractor or subcontractor. If the contractor or subcontractor fails to pay its subcontractor and suppliers by first-class mail or hand delivery within twenty-one days after receipt of an undisputed request for payment, the contractor or subcontractor shall pay interest to its subcontractors and suppliers beginning on the 22nd day after payment was due, computed at one and one-half percent of the undisputed amount per month or fraction of a month until payment is issued. These payment provisions apply to all tiers of contractors, subcontractors and suppliers (Section 57-28-1 et. seq. NMSA 1978).
- D. In preparing estimates the material delivered on the site and preparatory work done may be taken into consideration.
- E. All material and work covered by partial payments made shall thereupon become the sole property of the County, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the County to require the fulfillment of all of the terms of the contract.
- F. County's right to withhold certain amounts and make application thereof. The Contractor agrees that it will indemnify and hold the County harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnisher of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. The Contractor shall, at the County's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails so to do, then the County may, after having served written notice on the said Contractor, either pay unpaid bills, of which the County has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with

the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the County to either the Contractor or its Surety. In paying any unpaid bills of the Contractor, the County shall be deemed the agent of the Contractor, and any payment so made by the County shall be considered as a payment made under the contract by the County to the Contractor and the County shall not be liable to the Contractor for any such payments made in good faith.

## **ARTICLE 6 FINAL PAYMENT**

### **6.1 FINAL PAYMENT**

The entire unpaid balance of the Contract Sum, shall be paid by the County to the Contractor within 30 calendar days after notification of the County by the Architect/Engineer that all incomplete and unacceptable work that was noted during the Substantial Completion Inspection and listed on the attachment to the Certificate of Substantial Completion has been corrected, and provided the Contract has been fully performed and a final Certificate for Payment has been issued by the Architect/Engineer. In addition, the Contractor shall provide to the County a certified statement of Release of Liens and Consent of Surety.

### **6.2 ACCEPTANCE OF FINAL PAYMENT CONTITUTES RELEASE**

The acceptance by the Contractor of final payment shall be and shall operate as a release to the County of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the County and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate to release the Contractor or its sureties from any obligations under this contract or the Performance and Payment Bond.

**IN WITNESS WHEREOF**, the parties have duly executed this Agreement as of the date first written above.

### **SANTA FE COUNTY**

\_\_\_\_\_  
, Chair  
Santa Fe County Board of County Commissioners

### **ATTESTATION**

\_\_\_\_\_  
Geraldine Salazar  
Santa Fe County Clerk  
Approved as to form:

\_\_\_\_\_  
Gregory S. Shaffer  
Santa Fe County Attorney

\_\_\_\_\_  
Date

Finance Department:

\_\_\_\_\_  
Don D. Moya  
Finance Director

\_\_\_\_\_  
Date

**CONTRACTOR:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Title



**GENERAL CONDITIONS  
TO AGREEMENT BETWEEN SANTA FE COUNTY  
AND CONTRACTOR  
FOR CONSTRUCTION SERVICES**

**1.0 DEFINITIONS**

The following terms as used in this contract are respectively defined as follows:

- 1.1** *Application for Payment* Contractor's written request for payment for completed portions of the work and, for materials delivered or stored and properly labeled for the respective project.
- 1.2** *Change Order* A written document between the County and the Contractor signed by the County and the Contractor authorizing a change in the work or an adjustment in the contract sum or the contract time. A change order may be signed by the Architect/Engineer, provided they have written authority from the County for such procedure and that a copy of such written authority is furnished to the Contractor upon request. The contract sum and the contract time may be changed only by change order. A change order may be in the form of additional compensation or time; or less compensation or time known as a Deduction (from the contract) the amount deducted from the contract sum by change order.
- 1.3** *Calendar Day* Each and every Day shown on the calendar, beginning and ending at midnight.
- 1.4** *Contract Period* The elapsed number of working days or calendar days from the specified date of commencing work to the specified date of completion, as specified in the contract.
- 1.5** *Contractor* is a person, firm or corporation with whom the contract is entered into with the County.
- 1.6** *Construction Documents* All drawings, specifications and addenda associated with a specific construction project.
- 1.7** *Construction Schedule* A schedule in form satisfactory to the County, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the contract documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule.
- 1.8** *Day* The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.
- 1.9** *Labor and Material Payment Bond* A written form of security from a surety (bonding) company to the County, on behalf of an acceptable prime Contractor or

subcontractor, guaranteeing payment to the County in the event the Contractor fails to pay for all labor, materials, equipment, or services in accordance with the contract. (see Performance Bond and Surety Bond).

- 1.10 *Lump Sum Agreement (See Stipulated Sum Agreement)***
- 1.11 *Lump Sum Bid*** A single entry amount to cover all labor, equipment, materials, services, and overhead and profit for completing the construction of a variety of unspecified items of work without the benefit of a cost breakdown.
- 1.12 *Lump Sum Contract*** A written contract between the County and Contractor wherein the County agrees to pay the contractor a specified sum of money for completing a scope of work consisting of a variety of unspecified items or work.
- 1.13 *Payment Bond*** A written form of security from a surety company to the County, on behalf of an acceptable prime contractor or subcontractor, guaranteeing payment to all persons providing labor, materials, equipment, or services in accordance with the contract.
- 1.14 *Performance Bond*** A written form of security from a surety company to the County, on behalf of an acceptable prime contractor or subcontractor, guaranteeing the completion of the work in accordance with the terms of the contract.
- 1.15 *Progress Payment*** A payment from the County to the Contractor determined by calculating the difference between the completed work and materials stored and a predetermined schedule of values or unit costs. (see Schedule of Values, Unit Costs).
- 1.16 *Progress Schedule*** A pictorial or written schedule (including a graph or diagram) that shows proposed and actual start and completion dates of the various work elements.
- 1.17 *Punch list*** a list of items to be completed or corrected, prepared by the Architect/Engineer, checked and augmented as required by the Contractor or Construction Manager is appended hereto as Exhibit J. Note: The failure to include any item on such list does not relieve the Contractor of the responsibility to complete all work in accordance with the contract documents.
- 1.18 *Schedule of Values*** A statement furnished by the Contractor to the Architect or Engineer and the County reflecting the portions of the contract sum allotted for the various parts of the work and used as the basis for reviewing the Contractor's Applications for Payment.
- 1.19 *Services*** Includes services performed, workmanship, and material furnished or utilized in the performance of services.
- 1.20 *Stipulated Sum Agreement*** A written agreement in which a specific amount is set forth as the total payment for completing the contract (See Lump Sum Contract).

- 1.21** *Subcontractor* is a person, firm or corporation supplying labor and materials or only labor for work at the site of the project for, and under separate contract or agreement with, the Contractor.
- 1.22** *Unit Price Contract* A written contract wherein the County agrees to pay the Contractor a specified amount of money for each unit of work successfully completed as set forth in the contract.
- 1.23** *Unit Prices* A predetermined price for a measurement or quantity of work to be performed within a specific contract. The designated unit price would include all labor materials, equipment or services associated with the measurement or quantity established.
- 1.24** *Working Day* means every day except Saturday, Sunday and holidays recognized by Santa Fe County. Based on a review of weather that may adversely affect the Contractor's ability to effectively prosecute the Work, and the actual Work performed by the Contractor, the Architect or Engineer will determine (between the end of the day and noon of the next day) if the County will charge a Working Day. If the Contractor was able to effectively prosecute Work on a critical path item for six (6) or more hours on a Saturday, Sunday or County-recognized Holiday, the Architect or Engineer may charge a Working Day.
- 1.25** *Work on (at) the project* is work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any subcontractor.

## **2. CONTRACT AND CONTRACT DOCUMENTS**

- 2.1** Entire Agreement. This Agreement represents the entire contract between the parties and, except as otherwise provided herein, may not be amended, changed, modified, or altered without the written consent of the parties hereto. This Agreement incorporates all of the conditions, agreements, and understandings between the parties concerning the subject matter of this Agreement, and all such conditions, understandings, and agreements have been merged into this written Agreement. No prior condition, agreement, or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless incorporated in this written Agreement.
- 2.2** Relationship of Contract Documents. The Contract Documents are complementary, and any requirement of one Contract Document shall be as binding as if required by all.
- 2.3** Conflicting Conditions. Any provisions in any of the Contract Documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be void to the extent of such conflict or inconsistency.

## **3. PLANS, SPECIFICATIONS AND ADDENDA**

- 3.1** The plans, specifications and addenda, hereinafter enumerated in Article 1 of the Agreement Between County and Contractor for Construction shall form part of this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect or limit the interpretation of the provisions to which they refer.
- 3.2** Certificates and Documents Incorporated. All certificates and documentation required by the provisions of the Agreement shall be attached to this Agreement at the time of execution, and are hereby incorporated by reference as though set forth in full in this Agreement to the extent they are consistent with its conditions and terms.

#### **4. CONTRACT SECURITY – BONDS**

- 4.1** Performance Bond. The Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract sum as security for the faithful performance of this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law.
- 4.2** Payment Bond. The Contractor shall provide payment bond in an amount not less than one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by state, territorial or local law, as security for the payment of all persons performing labor on the project under this contract, furnishing materials in connection with this contract and all of Contractor's requirements as specified in the contract documents. The Payment Bond shall remain in effect until one year after the date when final payment becomes due.
- 4.3** Additional or Substitute Bond. If at any time the County for justifiable cause shall be or become dissatisfied with any surety or sureties, then upon the Performance or Payment Bonds, the Contractor shall within five days after notice from the County so to do, substitute an acceptable bond (or bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the County. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished such an acceptable bond to the County.
- 4.4** Labor and Material Bond. The Contractor shall provide to the County Labor and Material Bond in an amount equal to the required payments by the Contractor to pay specified subcontractors, laborers, and materials suppliers associated with the project.

#### **5. TERMS AND MEANINGS**

Terms used in this Agreement that are defined in the Conditions of the Contract shall have the meanings designated in those Conditions.

- 5.1** Words and Phrases. Words, phrases, and abbreviations which have well-known technical or trade meanings used in the Contract Documents shall be used according to such recognized meanings. In the event of a conflict, the more stringent meaning shall govern.

- 5.2** Gender, Singular/Plural. Words of any gender used in this Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires.
- 5.3** Captions and Section Headings. The captions and section headings contained in this Agreement are for convenience of reference only, and in no way limit, define, or enlarge the terms, scope and conditions of this Agreement.
- 5.4** Interchangeable Terms. For purposes of all provisions within this Agreement and all attachments hereto, the terms “Agreement” and “Contract” shall have the same meaning and shall be interchangeable.

## **6. COMPLIANCE WITH APPLICABLE LAW, CHOICE OF LAW**

- 6.1** This Agreement shall be governed exclusively by the provisions hereof and by the laws of the State of New Mexico and applicable ordinances of Santa Fe County.
- 6.2** In performing its obligations hereunder, the Contractor shall comply with all applicable laws, ordinances, and regulations, including Santa Fe County Ordinance 2014-1 (Establishing a Living Wage).
- 6.3** Minimum Wage Rates. The Contractor, all subcontractors and sub-subcontractors warrants and agree to will comply with all applicable provisions of the New Mexico Public Works Minimum Wage Act as outlined in the Bid Documents. Wage rates are not applicable to projects costing less than \$60,000.
- 6.4** This Agreement shall be construed in accordance with the substantive laws of the State of New Mexico, without regard to its choice of law rules. Contractor and the County agree that the exclusive forum for any litigation between them arising out of or related to this Agreement shall be federal and state district courts of New Mexico.
- 6.5** Pursuant to 13-1-191, NMSA 1978, reference is hereby made to the criminal laws of New Mexico, including §30-14-1, §30-24-2, and §30-41-1 through 3 NMSA 1978, which prohibit bribes, kickbacks, and gratuities, violation of which constitutes a felony. Further, the Procurement Code, 13-1-28 through 13-1-199 NMSA 1978, imposes civil and criminal penalties for its violation.
- 6.6** New Mexico Tort Claims Act. By entering into this Agreement, neither party shall be responsible for liability incurred as a result of the other party’s acts or omissions in connection with this Agreement. Any liability incurred in connection with this Agreement is subject to the immunities and limitations of the New Mexico Tort Claims Act, Sections 41-4-1, et Seq. NMSA 1978, as amended. The County and its “public employees” as defined in the New Mexico Tort Claims Act, do not waive sovereign immunity, do not waive any defense and do not waive any limitation of liability pursuant to law. No provision in this Agreement modifies or waives any provision of the New Mexico Tort Claims Act.

- 6.7** Provision Required by Law Deemed Inserted. Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

## **7. EFFECTIVE DATE AND TERM**

- 7.1** This Agreement shall, upon due execution by all parties, become effective in accordance with the Agreement Between County and Contractor for Construction, Article 3 - Effective Date, Time of Commencement and Substantial Completion. This Agreement shall not become effective until: (1) approved by the Santa Fe County Commissioners and/or the County Manager or their designee; and (2) signed by all parties required to sign this Agreement.
- 7.2** This Contract shall achieve Substantial Completion in accordance with the Agreement Between County and Contractor, Article 3 - Effective Date, Time of Commencement and Substantial Completion, unless earlier terminated pursuant to Section 8 (Termination) or 9, (Appropriations and Authorizations) of these General Conditions.

## **8. TERMINATION**

- 8.1** Termination of Agreement for Cause. Either party may terminate the Agreement based upon any material breach of this Agreement by the other party. The non-breaching party shall give the breaching party written notice of termination specifying the grounds for the termination. The termination shall be effective 30 days from the breaching party's receipt of the notice of termination, during which time the breaching party shall have the right to cure the breach. If, however, the breach cannot with due diligence be cured within 30 days, the breaching party shall have a reasonable time to cure the breach, provided that, within 30 days of its receipt of the written notice of termination, the breaching party began to cure the breach and advised the non-breaching party in writing that it intended to cure.
- 8.2** Termination for Convenience of the County. The County may, in its discretion, terminate this Agreement at any time for any reason by giving the Contractor written notice of termination. The notice shall specify the effective date of termination, which shall not be less than 15 days from the Contractor's receipt of the notice. The County shall pay the Contractor for acceptable work, determined in accordance with the specifications and standards set forth in this Agreement, performed before the effective date of termination but shall not be liable for any work performed after the effective date of termination.
- 8.3** Right of the County to Terminate Contract In the event that any of the provisions of this contract are violated by the Contractor, or by any of its subcontractors, the County may serve written notice upon the Contractor and the Surety of its intention to terminate the contract, such notices to contain the reasons for such intention to terminate the contract, and unless within ten days after the serving of such notice upon the Contractor, such violation or

delay shall cease and satisfactory arrangement of correction be made, the contract shall, upon the expiration of said ten days, cease and terminate. In the event of any such termination, the County shall immediately serve notice thereof upon the Surety and the Contractor and the Surety shall have the right to take over and perform the contract. Provided, however, that if the Surety does not commence performance thereof within ten days from the date of the mailing to such Surety of notice of termination, the County may take over the work and prosecute the same to completion by contract or by force account and at the expense of the Contractor and the Contractor and its Surety shall be liable to the County for any excess cost occasioned the County thereby, and in such event the County may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

## **9. APPROPRIATIONS AND AUTHORIZATIONS**

This Agreement is contingent upon sufficient appropriations and authorizations being made for performance of this Agreement by the Santa Fe County Board of County Commissioners and/or, if state funds are involved, the New Mexico State Legislature. If sufficient appropriations and authorizations are not made in this or future fiscal years, this Agreement shall terminate upon written notice by the County to the Contractor. Such termination shall be without penalty to the County, and the County shall have no duty to reimburse the Contractor for expenditures made in the performance of this Agreement. The County is expressly not committed to expenditure of any funds until such time as they are programmed, budgeted, encumbered and approved for expenditure by the County. The County's decision as to whether sufficient appropriations and authorizations have been made for the fulfillment of this Agreement shall be final and not subject to challenge by the Contractor in any way or forum, including a lawsuit.

## **10. AMENDMENTS – CHANGE ORDERS**

Contract Documents may be amended by a Change Order, hereto attached as Exhibit I to allow for additions, deletions, and revision as specified in Article 2 "The Work" of the Agreement between Santa Fe County and the Contractor or to amend the terms and conditions by a Change Order.

## **11. INDEMNIFICATION**

- 11.1** The Contractor shall defend, indemnify, and hold harmless the County and its elected officials, agents, and employees from any losses, liabilities, damages, demands, suits, causes of action, judgments, costs or expenses (including but not limited to court costs and attorneys' fees) resulting from or directly or indirectly arising out of the Contractor's performance or non-performance of its obligations under this Agreement, including but not limited to the Contractor's breach of any representation or warranty made herein.
- 11.2** The Contractor agrees that the County shall have the right to control and participate in the defense of any such demand, suit, or cause of action concerning matters that relate to the County and that such suit will not be settled without the County's consent, such consent can not to be unreasonably withheld. If a conflict exists between the interests of the County and

the Contractor in such demand, suit, or cause of action, the County may retain its own counsel to represent the County's interest.

- 11.3** The Contractor's obligations under this section shall not be limited by the provisions of any insurance policy the Contractor is required to maintain under this Agreement.

## **12. AGGRIEVEMENT PROCEDURE DURING CONTRACT ADMINISTRATION**

- 12.1** Any claims, disputes, or other matters in question between the Contractor and the County, except those which have been waived by the making or acceptance of final payment as provided in Paragraph 6.2 of the Agreement Between Santa Fe County and Contractor for Construction, shall be presented in the form of a written request accompanied by supporting data to the Architect/Engineer for formal decision, with a copy to the other party. Such formal decision of the Architect/Engineer is binding upon the Contractor and the Owner unless either or both notify each other and the Architect/Engineer in writing within 15 calendar days of their receipt of the decision that they are unwilling to abide by the Architect's/Engineer's decision, are thereby aggrieved in connection with the decision, and are separately exercising such rights as either may have under the Contract Documents or by law and regulation. If the Architect/Engineer fails to provide a written decision or a reasonable schedule to issue a written decision within ten days after the County or the Contractor has presented its request, that party may consider itself aggrieved and may proceed to exercise its rights.

- 12.2** A settlement agreement signed by the County and the Contractor shall supersede and cancel any other dispute resolution proceedings regarding the same matter.

- 12.3** Unless work is stopped or payment withheld in accordance with the conditions of the Contract, or unless otherwise agreed in writing, the Contractor shall carry on the Work and maintain its progress during any dispute resolution proceedings, and the Owner shall continue to make payments to the Contractor in accordance with the Contract Documents.

## **13. DISPUTE RESOLUTION**

- 13.1** Either County or Contractor may request mediation pursuant to the New Mexico Public Works Mediation Act, 13-4C-1 NMSA 1978, of any claim before such decision become final and binding. The request for mediation shall be submitted in writing to the other party. Timely submission of the request shall stay the effect of Paragraph 12.1.

- 13.2** County and Contractor shall participate in the mediation process in good faith. The process shall be completed within 60 calendar days of filing of the request. The mediation shall be governed by the rules for mediation pursuant to the New Mexico Public Works Mediation Act.

- 13.3** If the dispute is not resolved by mediation, the dispute shall be resolved through litigation in the district court. The parties agree that the exclusive forum for such litigation shall be the State of New Mexico District Court for the First Judicial District at Santa Fe, New Mexico. Contractor irrevocably consents to the jurisdiction of said Court and agrees to accept service



of a summons and complaint by mail or commercial courier service in accordance with Rule 1-004(E) (3) NMRA.

#### **14. INSURANCE**

- 14.1** The Contractor shall not commence work under this contract until they have obtained all the insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on its subcontract until the insurance required of the subcontractor has been so obtained and approved.
- 14.2** Proof of Carriage of Insurance. The Contractor shall furnish the County with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions".
- 14.3** General Conditions. The Contractor shall submit evidence of insurance as is required herein. Policies of insurance shall be written by companies authorized to write such insurance in New Mexico.
- 14.4** General Liability Insurance, Including Automobile. The Contractor shall procure and maintain during the life of this Agreement a comprehensive general liability and automobile insurance policy with liability limits in amounts not less than \$1,000,000.00 combined single limits of liability for bodily injury, including death, and property damage for any one occurrence. Said policies of insurance shall include coverage for all operations performed for the County by the Contractor; coverage for the use of all owned, non-owned, hired automobiles, vehicles and other equipment, both on and off work; and contractual liability coverage under which this Agreement is an insured contract. The Santa Fe County shall be a named additional insured on the policy.
- 14.5** Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance. The Contractor shall require each of its subcontractors to procure and to maintain during the life of its subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in 14.4 above.
- 14.6** Workers' Compensation Insurance. The Contractor shall comply with the provisions of the Workers' Compensation Act, 52-1-1 to 52-1-70 NMSA 1978. The Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance as required by applicable State law for all of its employees to be engaged in work at the site of the project under this Contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation law, the Contractor shall provide and shall

cause each subcontractor to provide adequate employer's liability insurance for the protection of such of its employees as are not otherwise protected.

**14.7** Scope of Insurance and Special Hazards. The insurance require under subparagraphs 14.4 and 14.5 hereof shall provide adequate protection for the Contractor and his subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operations be by the insured or by anyone directly or indirectly employed by him and, also against any of the special hazards which may be encountered in the performance of this Contract.

**14.8** Builder's Risk Insurance (Fire and Extended Coverage). Until the project is completed and accepted by the County, the County, or Contractor at the County's option is required to maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portion of the project for the benefit of the County, the Contractor, subcontractors as their interests may appear. The Contractor shall not include any costs for Builder's Risk Insurance (fire and extended coverage) premiums during construction unless the Contractor is required to provide such insurance; however, this provision shall not release the Contractor from its obligation to complete, according to plans and specifications, the project covered by the contract, and the Contractor and his Surety shall be obligated to full performance of the Contractor's undertaking.

**14.9** Increased Limits. If, during the life of this Agreement, the New Mexico State Legislature increases the maximum limits of liability under the Tort Claims Act (NMSA 1978, Sections 41-4-1 through 41-4-29, as amended), the Contractor shall increase the maximum limits of any insurance required herein.

**14.10** Additional insured. Santa Fe County will be listed as an additional insured on all policies, and proof of coverage must be provided before work begins. Contractor shall maintain adequate insurance in at least the maximum amounts which the County could be liable under the New Mexico Tort Claims Act. It is the sole responsibility of the Contractor to be in compliance with the law.

## **15. INDEPENDENT CONTRACTOR**

**15.1** The Contractor and the Contractor's agents and employees are independent contractors performing professional and technical services for the County and are not employees of the County. The Contractor and the Contractor's agents and employees shall not accrue leave, retirement, insurance, bonding, use of County's vehicles, or any other benefits afforded to employees of the County as a result of this Agreement.

**15.2** The Contractor shall not subcontract any portion of the services to be performed under this Agreement without prior written approval of the County.

**15.3** The Contractor shall maintain detailed time records which indicate the date, time and nature of services rendered. These records shall be subject to inspection by the County and the State Auditor. The County shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose the right of the County to

recover excessive illegal payments.

**16. CONFLICT OF INTEREST OF OFFICERS OR EMPLOYEES OF THE LOCAL JURISDICTION, MEMBERS OF THE LOCAL GOVERNING BODY, OR OTHER PUBLIC OFFICIALS**

**16.1** No officer or employee of the local jurisdiction or its designees or agents, no member of the governing body, and no other public official of the locality who exercises any function or responsibility with respect to this contract, during its tenure or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed. Further, the Contractor shall cause to be incorporated in all subcontracts the language set forth in this paragraph prohibiting conflict of interest.

**16.2** No official of the County who is authorized in such capacity and on behalf of the County to negotiate, make, accept or approve, or to take part in negotiating, making accepting or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the County who is authorized in such capacity and on behalf of the County to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

**16.3** The Contractor warrants that the Contractor presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance or services required under this Agreement.

**17. ASSIGNMENT**

**17.1** The Contractor shall not assign or transfer any interest in this Agreement or assign any claims for money due or to become due under this Agreement without the advance written approval of the County. Any attempted assignment or transfer without the County's advance written approval shall be null and void and without any legal effect.

**18. SUBCONTRACTING**

**18.1** The Contractor shall not subcontract or delegate any portion of the services to be performed under this Agreement without the advance written approval of the County. Any attempted subcontracting or delegating without the County's advance written approval shall be null and void and without any legal effect.

**18.2** Contractor shall provide to the County a listing of subcontractors within ten (10) days of the Contract award.

**18.3** Contractor shall adhere to all provisions of the Subcontractor's Fair Practices Act 13-4-31 to

13-4-42, NMSA 1978.

- 18.4** Contractor shall provide to the County completed Non-Collusion Affidavit of Subcontractor form and Certification of Subcontractor Regarding Equal Employment Opportunity form for all subcontractors listed.
- 18.5** The Contractor shall not award any work to any subcontractor without prior written approval of the County, which approval will not be given until the Contractor submits to the County a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the County may require.
- 18.6** The Contractor shall be as fully responsible to the County for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as they are for the acts and omissions of persons directly employed by them.
- 18.7** The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the County may exercise over the Contractor under any provision of the contract documents.
- 18.8** Nothing contained in this contract shall create any contractual relation between any subcontractor and the County.
- 18.9** All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate written agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of County. Any contract between Contractor and a Subcontractor or Supplier shall provide that any remedy or claim for nonpayment of sums due or owing to Subcontractor or Supplier or services performed or materials provided is against Contractor and not County, subject to any remedy or rights Subcontractor or Supplier may have under the terms of the Contractor's Performance Bond and Section 13-4-19 NMSA 1978, the New Mexico Little Miller Act.

## **19. PERSONNEL**

- 19.1** All work performed under this Agreement shall be performed by the Contractor or under its supervision.
- 19.2** The Contractor represents that it has, or will secure at its own expense, all personnel required to discharge its obligations under this Agreement. Such personnel (i) shall not be employees of or have any contractual relationships with the County and (ii) shall be fully qualified and licensed or otherwise authorized or permitted under federal, state, and local law to perform such work.

## **20. NOTICES**

- 20.1** Any notice required to be given to either party by this Agreement shall be in writing and

shall be delivered in person, by courier service or by U.S. mail, either first class or certified, return receipt requested, postage prepaid, as follows:

To the County: Santa Fe County  
Office of the County Attorney  
102 Grant Avenue  
Santa Fe, New Mexico 87501

To the Contractor: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**20.2** Nothing herein contained shall preclude the giving of any such written notice by personal service. The address to which notices shall be mailed to either party may be changed by written notice given by such party to the other as hereinabove provided.

## **21. RELEASE**

The Contractor, upon final payment of the amounts due under this Agreement, releases the County, the County's officers and employees from all liabilities and obligations arising from or under this Agreement, including, without limitation, all damages, losses, costs, liability, and expenses, including, without limitation, attorney's fees and costs of litigation that the Contractor may have.

## **22. WAIVER**

No provision of this Agreement shall be deemed to have been waived by either party unless such waiver be in writing signed by the party making the waiver and addressed to the other party; nor shall any custom or practice which may evolve between the parties in the administration of the terms hereof be construed to waive or lessen the right of either party to insist upon performance by the other party in strict accordance with the terms hereof. Further, the waiver by any party of a breach by the other party of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or any other term, covenant, or condition thereof.

## **CONDITIONS OF THE WORK**

### **1. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS**

**1.1** The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the Contract. The additional drawings and instructions supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Architect/Engineer/County will prepare jointly (a) a schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Architect/ Engineer/County in accordance with the schedule, and (b) a

schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each schedule to be subject to change from time to time in accordance with progress of the work.

## **2. SHOP OR SETTING DRAWINGS**

- 2.1** The Contractor shall submit promptly to the Architect/Engineer/County two (2) copies of each shop or setting drawing prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Architect/Engineer/County and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Architect/ Engineer/County with two corrected copies. If requested by the Architect/Engineer/County the Contractor must furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Architect/Engineer/County, the Contractor will be responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications, unless the Contractor notifies the Architect/Engineer/County in writing of any deviations at the time the Contractor furnishes such drawings.

## **3. MATERIALS, SERVICES AND FACILITIES**

**3.1** It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

**3.2** Any work necessary to be performed after regular working hours, on Sundays or legal holidays, shall be performed without additional expense to the County.

## **4. CONTRACTOR'S TITLE TO MATERIALS**

- 4.1** No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he/she has good title to all materials and supplies used by him/her in the work, free from all liens, claims or encumbrances.

## **5. INSPECTION AND TESTING OF MATERIALS**

- 5.1** All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the County. The County will pay for all laboratory inspection service direct, and not as a part of the Contract.
- 5.2** Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance

with specifications and suitability for uses intended.

## **6. "OR EQUAL" CLAUSE**

- 6.1** Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article, or equipment or other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is, in the opinion of the Architect/Engineer/County, of equal substance and function. It shall not be purchased or installed by the Contractor without the Architect/Engineer/County's written approval.

## **7. PATENTS**

- 7.1** The Contractor shall hold and save the County and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the County, unless otherwise specifically stipulated in the Contract Documents.
- 7.2** License and/or Royalty Fees for the use of a process which is authorized by the County of the project must be reasonable, and paid to the holder of the patent, or its authorized licensee, direct by the County and not by or through the Contractor.
- 7.3** If the Contractor uses any design, device or materials covered by letters, patent or copyright, the Contractor shall provide for such use by suitable agreement with the County of such patented or copyrighted design, device or material. It is mutually agreed and understood, that, without exception, the Contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or its Sureties shall indemnify and save harmless the County of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials, or any trademark or copyright in connection with work agreed to be performed under this Contract, and shall indemnify the County for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after, completion of the work.

## **8. SURVEYS, PERMITS AND REGULATIONS**

- 8.1** Unless otherwise expressly provided for in the Specifications, the County will furnish to the Contractor all surveys necessary for the execution of the work.
- 8.2** Unless otherwise expressly provided for in the Specifications, the Contractor shall procure and pay all permits, licenses and approvals necessary for the execution of this Contract.
- 8.3** The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to performance of the work, the protection of adjacent property, and the maintenance of

passageways, guard fences or other protective facilities.

## **9. CONTRACTOR'S OBLIGATIONS**

- 9.1** The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this Contract, within the time herein specified. The Contractor will perform the Work in accordance with the provisions of this Contract and said specifications and in accordance with the plans and drawings covered by this Contract any and all supplemental plans and drawings, and in accordance with the directions of the Architect/Engineer/County as given from time to time during the progress of the work. The Contractor shall furnish, erect, maintain, and remove such construction plans and such temporary works as may be required.
- 9.2** The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the Contract and specifications, and shall do, carry on, and complete the entire work to the satisfaction of the Architect/Engineer and the County.

## **10. WEATHER CONDITIONS**

- 10.1** In the event of temporary suspension of work, or during inclement weather, or whenever the Architect/Engineer/County shall direct, the Contractor will, and will cause its subcontractors to protect carefully its and their work and materials against damage or injury from the weather. If, in the opinion of the Architect/Engineer/County, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of its Subcontractors so to protect its work, such materials shall be removed and replaced at the expense of the Contractor.

## **11. PROTECTION OF WORK AND PROPERTY-EMERGENCY**

- 11.1** The Contractor shall at all times safely guard the County's property from injury or loss in connection with this Contract. The Contractor shall at all times safely guard and protect its own work, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury unless such is caused directly by errors contained in the Contract or by the County, or its duly authorized representatives.
- 11.2** In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Architect/Engineer/County, in a diligent manner. The Contractor shall notify the Architect/Engineer/County immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Architect/Engineer/County for approval.
- 11.3** Where the Contractor has not taken action but has notified the Architect/Engineer/County of an emergency threatening injury to persons or to damage to the work or any adjoining property, the Contractor shall act as instructed or authorized by the



Architect/Engineer/County.

- 11.4** The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in Paragraph 15 of these Conditions of the Work.

## **12. INSPECTION**

- 12.1** The authorized representatives and agents of the County shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

## **13. REPORTS, RECORDS AND DATA**

- 13.1** The Contractor shall submit to the County such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the County may request concerning work performed or to be performed under this Contract.

## **14. SUPERINTENDENT BY CONTRACTOR**

- 14.1** At the site of the work the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Architect/ Engineer/County and shall be one who can be continued in that capacity for the particular job involved unless he/she ceases to be on the Contractor's payroll.

## **15. CHANGES IN WORK**

- 15.1** No changes in the work covered by the approved Contract Documents shall be made without having prior written approval of the County. Charges or credits for the work covered by the approved change shall be determined by one or more, or a combination of the following methods:

- A. Unit bid prices previously approved.
- B. An agreed lump sum.
- C. The actual cost of:
  - 1) Labor, including foremen;
  - 2) Materials entering permanently into the work;
  - 3) The County's or rental cost of construction equipment during the time of use on the extra work;
  - 4) Power and consumable supplies for the operation of power equipment;
  - 5) Insurance;
  - 6) Social Security and old age and unemployment contributions.
- D. To the costs for changes in work a fixed fee will be added to be agreed upon but not to exceed ten percent (10%) of the actual cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expenses.

## **16. EXTRAS**

- 16.1** Without invalidating the contract, the County may order extra work or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly, and the consent of the Surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the County or the Architect/Engineer, acting officially for the County, and the price is stated in such order.

## **17. INSPECTION OF SERVICES**

- 17.1** The Contractor shall provide and maintain an inspection system acceptable to the County covering the services under this Contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the County during contract performance and for as long afterwards as the Contract requires.
- 17.2** The County has the right to inspect and test all services called for by the Contract, to the extent practicable at all times and places during the term of the Contract. The County shall perform inspections and tests in a manner that will not unduly delay the work.
- 17.3** If the County performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.
- 17.4** If any of the services do not conform with the Contract requirements, the County may require the Contractor to perform the services again in conformity with Contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by re-performance, the County may require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and reduce the Contract sum to reflect the reduced value of the services performed.
- 17.5** If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with Contract requirements, the County may by contract or otherwise, perform the services and charge to the Contractor any cost incurred by the County that is directly related to the performance of such service, or terminate the Contract for default.

## **18. CORRECTION OF WORK**

- 18.1** All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Architect/ Engineer/County who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet their approval they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor at its own expense. Rejected material shall immediately be removed from the

site. If, in the opinion of the Architect/Engineer/County, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Architect/Engineer/County shall be equitable.

## **19. WARRANTY OF CONSTRUCTION**

- 19.1** In addition to any other warranties in this Contract, the Contractor warrants that work performed under this Contract conforms to the Contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.
- 19.2** This warranty shall continue for a period of one (1) year from the date of final acceptance of the work. If the County takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one (1) year from the date the County takes possession.
- 19.3** The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to County-owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements or any defect of equipment, material, workmanship, or design furnished.
- 19.4** The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one (1) year from the date of repair or replacement.
- 19.5** The County shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.
- 19.6** If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the County shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- 19.7** With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this Contract, the Contractor shall obtain all warranties that would be given in normal commercial practice; require all warranties to be executed, in writing, for the benefit of the County, if directed by the County; and, enforce all warranties for the benefit of the County, if directed by the County.
- 19.8** In the event the Contractor's warranty under subparagraph 19.4 of this clause has expired, the County may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.
- 19.9** Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design

furnished by the County nor for the repair of any damage that results from any defect in County-furnished material or design.

- 19.10** This warranty shall not limit the County's rights under the Inspection and Acceptance clause of this Contract with respect to latent defects, gross mistakes, or fraud.

## **20. SUBSURFACE CONDITIONS FOUND DIFFERENT**

- 20.1** Should the Contractor encounter sub-surface and/or latent conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, the Contractor shall immediately give notice to the Architect/Engineer/County of such conditions before they are disturbed. The Architect/Engineer/County will thereupon promptly investigate the conditions, and if they find that they materially differ from those shown on the Plans or indicated in the Specifications, they will at once make such changes in the Plans and/or Specifications as they may find necessary, any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in Paragraph 15 above.

## **21. CLAIMS FOR EXTRA COST**

- 21.1** No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Architect/Engineer approved by the County, as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of General Conditions, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the County, giving the County access to accounts relating thereto.

## **22. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES**

- 22.1** Immediately after execution and delivery of the Contract, and before the first partial payment is made, the Contractor shall deliver to the County an estimated construction progress schedule in a form satisfactory to the County, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the County (a) a detailed estimate giving a complete breakdown of the Contract sum and (b) periodic itemized estimates of work done for the purpose of making partial payments thereof. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the Contract price.

### **22.2 Schedule**

The Contractor shall, within five (5) days after the effective date of Notice to Proceed, prepare and submit five (5) copies of a progress schedule covering project operations for the Contract period. This progress schedule shall be of the type generally referred to as a Critical Path Method (CPM), Critical Path Schedule (CPS), and Critical Path Analysis (CPA), and other similar designations. The CPM shall be used to control the timing and

sequences of the project. All work shall be done in accordance with the CPM Planning and Scheduling. A written statement of explanation shall be submitted with the progress schedule. All costs incurred by the contractor to implement the CPM shall be borne by the Contractor.

## **23. ASSIGNMENTS**

- 23.1** The Contractor shall not assign the whole or any part of this Contract or any monies due or to become due hereunder without written consent of the County. In case the Contractor assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations of services rendered or materials supplied for the performance of the work called for in this Contract.

## **24. MUTUAL RESPONSIBILITY OF CONTRACTORS**

- 24.1** If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration if such other Contractor or subcontractors will so settle. If such other Contractor or subcontractor shall assert any claim against the County on account of any damage alleged to have been sustained, the County shall notify the Contractor, who shall indemnify and save harmless the County against any such claim.

## **25. SEPARATE CONTRACT**

- 25.1** The Contractor shall coordinate its operations with those of other contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including its subcontractors, shall keep informed of the progress and the detail work of other contractors and shall notify the Architect/Engineer/County immediately of lack of progress or defective workmanship on the part of other contractors. Failure of a contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by the Contractor of the status of the work as being satisfactory for proper coordination with its own work.

## **26. ARCHITECT/ENGINEER'S AUTHORITY**

- 26.1** The Architect/Engineer/County shall give all orders and directions contemplated under this Contract and specifications, relative to the execution of the work. The Architect/Engineer/County shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this Contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Architect/Engineer/County's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or

decision of the Architect/Engineer/County shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this Contract affected in any manner or to any extent by such question.

- 26.2** The Architect/Engineer/County shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this Contract and other Contractors performing work for the County shall be adjusted and determined by the Architect/Engineer/County.

## **27. STATED ALLOWANCES**

- 27.1** It is understood that Contractor has included in its proposal for the Contract sum all allowances including "Allowed Materials" The Contractor shall purchase the "Allowed Materials" as directed by the County on the basis of the lowest and best bid of at least three competitive bids. If the actual sum for purchasing the "Allowed Materials" is more or less than the "Cash Allowance," the Contract sum shall be adjusted accordingly. The adjustment in contract price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable sections of the Contract Specifications covering this work.

## **28. USE OF PREMISES AND REMOVAL OF DEBRIS**

- 28.1** The Contractor expressly undertakes at its own expense:

- A. to take every precaution against injuries to persons or damage to property;
- B. to store its apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of its work or the work of any other subcontractors;
- C. to place upon the work or any part thereof only such loads as are consistent with the safety of the portion of the work;
- D. to clean up frequently all refuse, rubbish, scrap materials, and debris caused by its operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
- E. before final payment to remove all surplus material, false-work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from its operations, and to put the site in a neat, orderly condition.
- F. to effect all cutting, fitting or patching of its work required to make the same to conform to the plans and specifications and, except with the consent of the Architect/Engineer/County, not to cut or otherwise alter the work of any other Contractor.

## **29. QUANTITIES OF ESTIMATE**

- 29.1** Wherever the estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of the documents including the proposal, they are given for

use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the County to complete the work contemplated by this Contract, and such increase or diminution shall in no way void this Contract, nor shall any such increase or diminution give cause for claims or liability for damages.

### **30. LANDS AND RIGHTS-OF-WAY**

**30.1** Prior to the start of construction, the County shall obtain all lands and rights-of-way necessary for the carrying out and completions of work to be performed under this Contract.

### **31. GENERAL GUARANTY**

**31.1** Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the County, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of final acceptance of the work unless a longer period is specified. The County will give notice of observed defects with reasonable promptness.

### **32. PROTECTION OF LIVES AND HEALTH**

**32.1** The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of its prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken, such additional safety and health measures as the County may determine to be reasonably necessary.

### **33. INTEREST OF MEMBER**

**33.1** No member of Santa Fe Board of County Commissioners shall be admitted to any share or part of this Contract or to any benefit that may arise therefrom.

### **34. OTHER PROHIBITED INTERESTS**

**34.1** No official of the County who is authorized in such capacity and on behalf of the County to negotiate, make, accept or approve, or to take part in negotiating, making accepting or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this Contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the County who is authorized in such capacity and on behalf of the County to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this Contract or in any part

thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

**35. USE AND OCCUPANCY PRIOR TO ACCEPTANCE BY COUNTY**

**35.1** The Contractor agrees to the use and/or occupancy of a portion or unit of the project before formal acceptance by the County, provided the County:

- A. Secures written consent of the Contractor except in the event, in the opinion of the Architect/ Engineer, the Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other contract requirements.
- B. Secures endorsement from the insurance carrier and consent of the surety permitting occupancy of the building or use of the project during the remaining period of construction.
- C. When the project consists of more than one building, and one of the buildings is occupied, secures permanent fire and extended coverage insurance, including a permit to complete construction. Consent of the surety must also be obtained.



# **ATTACHMENT A**

## **BID SHEETS**

**ATTACHMENT B**  
**ADDENDA & MODIFICATIONS**

**EXHIBIT A**  
**PROJECT MANUAL**

## **EXHIBIT B**

TECHNICAL SPECIFICATIONS AS LISTED IN PLAN SET

**EXHIBIT C****LABOR AND MATERIAL PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENT, THAT WE \_\_\_\_\_  
 \_\_\_\_\_ as PRINCIPAL hereinafter called the "PRINCIPAL and  
 \_\_\_\_\_ as SURETY hereinafter called the "SURETY", are held and  
 firmly bound unto Santa Fe County, a Political Subdivision of the State of New Mexico as OBLIGEE  
 hereinafter called the "COUNTY", for the use and benefit of any claimants as herein below defined, in the  
 amount of \_\_\_\_\_ (\$ . ) dollars for the payment whereof PRINCIPAL  
 and SURETY bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and  
 severally, firmly by these presents.

WHEREAS, the PRINCIPAL has a written contract dated \_\_\_\_\_, 20\_\_, with the  
 COUNTY for the construction services for the (insert project description) in Santa Fe  
County, New Mexico, which must be constructed in accordance with drawings and specifications which  
 contract is referenced and made a part hereof, and is hereinafter referred to as the "Contract."

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if PRINCIPAL shall  
 promptly make payment to all claimants as hereinafter defined, for all labor and material used or  
 reasonably required for use in the performance of the Contract, then this obligation shall be void;  
 otherwise, it shall remain in full force and effect, subject to the following conditions:

6. A claimant is defined as one having a direct contract with the PRINCIPAL or with a  
 subcontractor of the PRINCIPAL for labor, material, or both, used or reasonably required for  
 use in the performance of the Contract, labor and material being construed to include but not  
 be limited to that part of water, gas, power, light, heat, oil, gasoline, telephone services or  
 rental of equipment directly applicable to the Contract.
7. The above named PRINCIPAL and SURETY hereby jointly and severally agree with the  
 COUNTY that every claimant as herein defined, who has not been paid in full before the  
 expiration of a period of ninety (90) days after the date on which the last of such claimant's  
 work or labor was done or performed, or materials were furnished by such claimant, prosecute  
 a suit to final judgment for such sum or sums as may be justly due claimant, and have  
 execution thereof. The COUNTY shall not be liable for payment of any cost or expenses of  
 any such suit.
8. No suit or action shall be commenced hereunder by any claimant:
  - c. Unless claimant, or other than one having a direct contract with the PRINCIPAL, shall  
 have written notice in the form of an sworn statement to the COUNTY and any one or  
 both of the following: the PRINCIPAL or SURETY above named, within ninety (90)  
 days after such said claim is made or suit filed, stating with substantial accuracy the  
 amount claimed and the name of the party to whom the materials were furnished, or  
 for whom the work or labor was done or performed.
  - d. Such notice shall be served by mailing the same by registered mail or certified mail,  
 postage prepaid, in an envelope addressed to the COUNTY, PRINCIPAL or  
 SURETY, at any place where an office is regularly maintained by said COUNTY,  
 PRINCIPAL or SURETY for the transaction of business, or served in any manner in

which legal process may be served in the State in which the aforesaid project is located, save that such service need not be made by a public officer.

9. Any suit under this Labor and Material Bond must be instituted in accordance with the statute of limitation under Section 37-1-3 NMSA 1978.
10. No right of action shall accrue on this Bond to or for the use of any person or corporation other than subcontractors or sub-subcontractors of the said Contract between PRINCIPAL and Santa Fe County named herein.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2017.

\_\_\_\_\_  
CONTRACTOR – PRINCIPAL (signature)

By: \_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC (seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY (signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC (seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY'S Authorized New Mexico Agent

**EXHIBIT D****PERFORMANCE BOND**  
(SAMPLE)

A. KNOW ALL MEN BY THESE PRESENT, THAT WE \_\_\_\_\_, as PRINCIPAL hereinafter called the "CONTRACTOR" and \_\_\_\_\_, as SURETY hereinafter called the "SURETY", are held and firmly bound unto OBLIGEE Santa Fe County, a Political Subdivision of the State of New Mexico, hereinafter called the "COUNTY", in the sum of \_\_\_\_\_ (\$\_\_\_\_\_) dollars for the payment whereof CONTRACTOR and SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

B. WHEREAS, the CONTRACTOR has a written contract dated \_\_\_\_\_, 2017, with the COUNTY for the construction services for the (insert project description) Santa Fe County, New Mexico, in accordance with drawings and specifications which contract is referenced made part hereof, and is hereinafter referred to as the "Contract."

C. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly and faithfully perform said Contract (including any amendment thereto), then this obligation shall be null and void; otherwise it shall remain in full force and effect until the COUNTY shall by written instrument notify the SURETY that the obligation is discharged, except that the obligation shall continue for at least three (3) months following the expiration of the term of the Contract.

3. The SURETY hereby waives notice of any alteration or extension of the Contract time made by the COUNTY.
4. Whenever CONTRACTOR shall be, and is declared by the COUNTY to be in default under the Contract, the COUNTY having performed the COUNTY'S obligations thereunder, the SURETY must promptly remedy the default and shall promptly:
  - (3) Complete the Contract in accordance with its terms and conditions, or
  - (4) Obtain a bid or bids for submission to the COUNTY for completing the Contract in accordance with its terms and conditions, and upon determination by the COUNTY and SURETY of the lowest responsible bidder, arrange for a contract between such bidder and Santa Fe County, and make available as work progresses (even though there should be a default or a secession of defaults under the Contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price, but not exceeding, including other costs and damages for which the SURETY may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price" as used in this paragraph, shall mean the total amount payable by the COUNTY to CONTRACTOR under the Contract and any amendments thereto, less the amount properly paid by the COUNTY to CONTRACTOR.

D. No right of action shall accrue on this Performance Bond to or for the use of any person or corporation other than Santa Fe County named herein or the heirs, executors, administrators, or successors of Santa Fe County.

E. This Bond shall be enforceable without the need to have recourse to any judicial or arbitral proceedings.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2017.

\_\_\_\_\_  
CONTRACTOR – PRINCIPAL (signature)

By: \_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC (seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY (signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
NOTARY PUBLIC (seal)

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
SURETY'S Authorized New Mexico Agent



## EXHIBIT E

### ASSIGNMENT OF ANTITRUST CLAIMS

TO BE EXECUTED BY GENERAL CONTRACTORS, SUBCONTRACTORS, SUPPLIERS,  
AND SUBSUBCONTRACTORS OF CONTRACTORS ON COUNTY CONTRACTS.

FIRM NAME:  
ADDRESS:

PROJECT:

PHONE NO.:

PROJECT NO:

\_\_\_\_\_ agrees that any and all claims which it may have or may inure to it for overcharges resulting from antitrust violations as to goods, services, and materials purchased in connection with the above-referenced project are hereby assigned to Santa Fe County, but only to the extent that such overcharges are passed on to the County. It is agreed that the undersigned retains all rights to any such antitrust claims to the extent of any overcharges not passed on to the County, including the right to any treble damages attributable thereto.

FIRM: \_\_\_\_\_

BY: \_\_\_\_\_  
Signed by Individual empowered to obligate Suppliers,  
Subcontractors or Subsubcontractors

TITLE: \_\_\_\_\_

**EXHIBIT F**

**CERTIFICATE OF LIABILITY INSURANCE**

## EXHIBIT G

### NOTICE OF CONTRACT AWARD

**TO:**

**FROM:** \_\_\_\_\_, Public Works Department

**CONTRACT NO.** \_\_\_\_\_

**This is to inform that you that you have been awarded the Contract for:**

Project Name: \_\_\_\_\_

Date of Award \_\_\_\_\_ Amount of Award \_\_\_\_\_

**Contractor Information:**

Firm Name: \_\_\_\_\_ License# \_\_\_\_\_

Address: \_\_\_\_\_ Phone # \_\_\_\_\_

**It is anticipated that construction will take place:**

Approximate Starting Date: \_\_\_\_\_ Approximate Completion Date: \_\_\_\_\_

Santa Fe County hereby accepts your offer on the solicitation No. \_\_\_\_\_ as reflected in this award document. The rights and obligations of the parties shall be subject to and governed by this document and any documents attached or incorporated by reference.

**SANTA FE COUNTY**

Name of Public Works Director or designee: \_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
Signature

## EXHIBIT H

### NOTICE TO PROCEED

TO:

DATE:

PROJECT:

ATTN:

PROJECT NO.

CONTRACT NO.

IFB NO.

Enclosed is your copy of the Contract, which has been approved. Please consider this letter as official NOTICE TO PROCEED on the above-referenced project.

Your firm shall commence work within ten (10) calendar days of the above date and shall achieve Substantial Completion [REDACTED] calendar days thereafter, which shall be [REDACTED], 2017, unless modified by Change Order.

It is essential that you make reference to the above-stated project number on all documents sent to the Architect/Engineer from your office. These documents shall include correspondence, change order proposals, change orders, payment request statements, and all other project-related material which you forward to the Architect/Engineer for information and processing.

Also, before you may start any Work at the site, you must (add any other requirements):

OWNER:

Santa Fe County

SFC [REDACTED] DEPARTMENT

By:

[REDACTED]  
Director, SFC Department

# EXHIBIT I

## CHANGE ORDER

PROJECT:

CONTRACTOR

CHANGE ORDER NO:

ARCHITECT/ENGINEER

PROJECT NO:

Contractor Telephone:

Contractor e-mail:

ENGINEER'S/ARCHITECT'S PROJECT NO:

---

 CHANGE ORDER JUSTIFICATION (Provide definitive reason for proposed change order.)

---

 You are directed to make the following changes in this Contract: (Provide a detailed description of the Scope of the Work.)

---

 NOT VALID UNTIL SIGNED BY BOTH THE COUNTY AND THE ARCHITECT/ENGINEER.  
 Signature of the Contractor indicates agreement herewith, including any adjustment in the Contract Sum or Contract Time.
 

---

The Original Contract Sum	\$0.00
Net change by previously authorized Change Orders	\$0.00
The Contract Sum prior to this Change Order, the Contract Sum will be increased/decreased/unchanged	\$0.00
The new Contract Sum including this Change Order	\$0.00

The Contract Time will be increased/decreased/unchanged by  days.The date of Substantial Completion as of the date of this Change Order is:

**CHANGE ORDER SIGNATURE PAGE**

**APPROVED**

**SANTA FE COUNTY**

By: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to form:

By: \_\_\_\_\_

Date: \_\_\_\_\_

Gregory S. Shaffer  
County Attorney

Finance Department:

By: \_\_\_\_\_

Date: \_\_\_\_\_

Don D. Moya  
Finance Director

**CONTRACTOR**

By: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

**ARCHITECT/ENGINEER**

By: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

## EXHIBIT J

### CERTIFICATE OF SUBSTANTIAL COMPLETION

**SANTA FE COUNTY – (INSERT DEPARTMENT)**

**Public Works Director or designee (name):** \_\_\_\_\_

**CONTRACTOR:** \_\_\_\_\_

Contractor Purchase Order Number: \_\_\_\_\_

**ARCHITECT/ENGINEER:** \_\_\_\_\_

Project Name: \_\_\_\_\_

Contract Date: \_\_\_\_\_

Project Description - Article 2 to Agreement Between Santa Fe County and Contractor (include address and project location description):

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The contractor hereby certifies the Work of this project to be in complete conformance to the Contract Documents and is substantially complete, enabling the County to make use of the Work as intended.

By its signature below the Contractor further requests Architect/Engineer and County to inspect the Work and to concur in the Work's substantial completion by their signature and/or to provide in a timely manner to Contractor a listing of work items adjudged by them as remaining to be completed or corrected. Contractor agrees to complete and correct all work items (Punch List) representative of such listing within \_\_\_\_ days from date of receipt from Architect/Engineer.

**Contractor**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

**Accepted by Santa Fe County**

_____ Signature (Public Works Director or Designee)	_____ Print Name	_____ Date
--	---------------------	---------------

**Inspected/Concurrence Architect/Engineer**

_____ Signature	_____ Print Name	_____ Date
--------------------	---------------------	---------------

**PUNCH LIST**

A list of items (Punch List) to be completed or corrected, verified by the Architect/Engineer and County, is appended hereto. Failure to include any incomplete items on such list does not alter the responsibility of the Contractor to provide all Work in complete conformance with the Contract Documents.

The Contractor shall complete or correct the work on the punch list appended hereto by \_\_\_\_\_  
(Date)

The punch list consists of \_\_\_\_\_(indicate number of items) items.

The Work performed under this Contract has been reviewed and found to be substantially complete by the Director of Public Works who has hereby established the Date of Substantial Completion as \_\_\_\_\_ (date) which is also the date of commencement of all warranties and guarantees required by the Contract Documents. The Date of Substantial Completion of the Work or designated portion thereof is the date established by the Director of Public Works (or designee) when construction is sufficiently complete, in accordance with the Contract Documents, so the County may occupy the Work, or designated portion thereof, for the use for which it is intended.

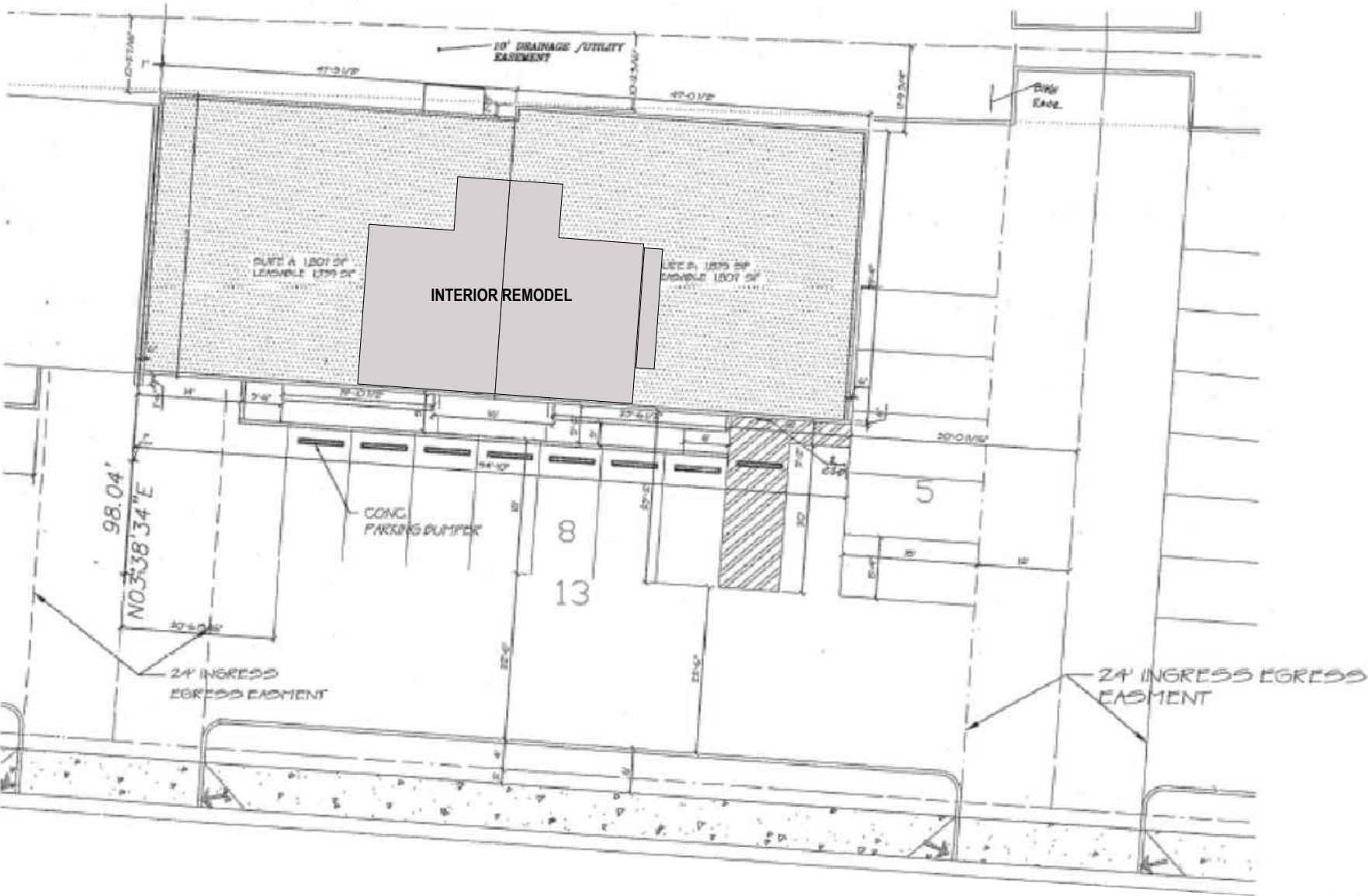
The County accepts the Work or designated portion thereof as substantially complete and assumes full possession thereof, in accordance with the contract documents.

Punch List Items: (Use additional sheets if necessary)

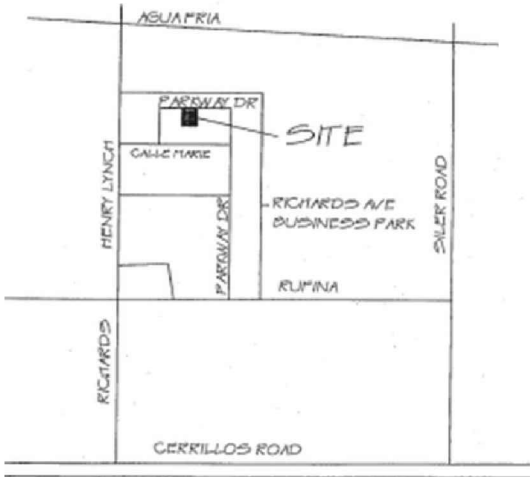


**APPENDIX E**

**Specifications and Plans  
(As Follows)**



S SITE PLAN  
1"=20'



V VICINITY MAP  
NTS

PROJECT SUMMARY:

ADDING A NEW KITCHENETTE ON AND  
STORAGE CLOSETS MAIN LEVEL IN SUITE A  
& B BUILDING  
ALSO CONVERTING EXISTING MEZZANINE  
TO OFFICE SPACE.

GENERAL NOTES:

1. CONTRACTOR TO ISOLATE ALL  
UTILITIES PRIOR TO DEMOLITION TO  
AVOID FLOOD OR ELECTRICAL SHOCK,

PROJECT DATA :

**PROJECT:** SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITE A&B  
SANTA FE, NM 87110

**ARCHITECT:** ROBERT RAYNER, ARCHITECT  
NM REG. #4948  
730 SAN MATEO BLVD. SUITE 1  
ALBUQUERQUE, NM 87108  
505-792-6224

**BUILDER**  
**ZONING:** C-2

**PROPERTY UPC:** 1051097001184

**LEGAL DESC:** LOT 52 , RICHARDS AVE. BUSINESS PARK  
1160 PARKWAY DRIVE SUITES A&B  
SANTA FE, NM

**ACRES:** .288 AC

**BUILDING CODE:** INTERNATIONAL EXISTING BUILDING CODE (IEBC) 2009  
INTERNATIONAL BUILDING CODE (IBC) 2009  
NEW MEXICO BUILDING CODE (COMMERCIAL)

**ACCESSIBILITY CODE:** ICC/ANSI A 117.1-2006

**CONST. TYPE:** V-B

**BUILDING AREA:** 920 SF, EXTERIOR REMODEL

**ALLOWABLE AREA:** 9000 SF

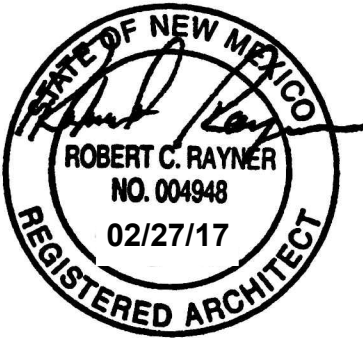
**BUILDING HEIGHT:** 23'-6"

**OCCUPANCY TYPE:** B

**PARKING :** PARKING IS EXISTING AND UNCHANGED

INDEX OF DRAWINGS:

- C100 SITE PLAN, PROJECT DATA, & ROOF PLAN  
A100 MAIN LEVEL FLOOR PLAN & UPPER LEVEL FLOOR PLAN.  
A101 MAIN LEVEL FLOOR PLAN (KITCHENETTE) MAIN LEVEL  
FLOOR PLAN (STORAGE). CABINET ELEVATIONS AND  
STORAGE ELEVATIONS.  
A102 UPPER LEVEL FLOOR PLAN & DOOR SCHEDULE & ADDITIVE  
ALTERNATE (CLOSET & WALL TYPE LEGEND.  
A001 SPEC SHEETS  
A002 SPEC SHEETS  
E001 ELECTRICAL GENERAL INFORMATION.  
E101 ELECTRICAL FLOOR PLAN.  
E601 ELECTRICAL DIAGRAMS.  
M001 MECHANICAL GENERAL INFORMATION.  
M101 MECHANICAL FLOOR PLAN.  
M601 MECHANICAL DIAGRAMS.



R<sup>2</sup> ARCHITECTURAL DESIGN  
730 SAN MATEO BLVD SE, SUITE 1  
ALBUQUERQUE, NEW MEXICO 87108  
TEL: 505.792.6224 FAX: 888.892.5814

DS	RR	02/27/17	AS SHOWN
DRAWN BY:	CHECKED BY:	DATE:	SCALE:

SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM

MAIN LEVEL FLOOR PLAN & UPPER LEVEL FLOOR PLAN

-SHEET-

A100

DIVISION 1- GENERAL REQUIREMENTS

1.0 COORDINATION:

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL COORDINATION OF THE ENTIRE PROJECT. EACH SUBCONTRACTOR SHALL BE RESPONSIBLE TO ADVISE AND COORDINATE THEIR PHASE OF THE WORK THROUGH THE GENERAL CONTRACTOR AND WITH OTHER SUBCONTRACTORS WORKING ON THE PROJECT.

ANYTHING CALLED FOR IN SPECIFICATIONS NOT SHOWN IN THE DRAWINGS OR SHOWN ON THE DRAWINGS AND NOT CALLED FOR IN THE SPECIFICATIONS SHALL BE INCLUDED IN GENERAL CONTRACTOR'S WORK THE SAME AS IF INCLUDED IN BOTH.

SUPERINTENDENCE: IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO VERIFY ALL DATA, DIMENSIONS AND CONDITIONS OF THESE WORKING DRAWINGS AND OF THE SITE BEFORE PROCEEDING WITH ANY WORK. DISCREPANCIES OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. THE GENERAL CONTRACTOR'S SUPERINTENDENT SHALL BE CAPABLE OF READING AND INTERPRETING THE DRAWINGS AND SPECIFICATIONS AND SHALL BE COMPETENT TO DIRECT THE EXECUTION OF THE WORK.

ALL WORK WILL CONFIRM TO THE REGULATIONS AND CRITERIA AS SET FORTH BY THE LATEST ADDITION OF THE INTERNATIONAL BUILDING CODE AS APPROVED BY THE STATE OF NEW MEXICO CONSTRUCTION INDUSTRIES DIVISION AND THE CITY OF SANTA FE. ALL APPLICABLE CODES, ORDINANCES, REGULATIONS AND GENERAL CONDITIONS AS SET FORTH BY THE STANDARD EDITION OF THE AGREEMENT BETWEEN OWNER AND CONTRACTOR OF THE AMERICAN INSTITUTE OF ARCHITECTS SHALL APPLY.

THESE SPECIFICATIONS ARE PRESENTED IN BRIEF OUTLINE FORM. THE OMISSION OF REPETITIOUS PARAGRAPHS DEALING WITH WORKMANSHIP, SCOPE OF WORK REFERENCE TO DRAWINGS AND TECHNICAL MATERIAL SHALL NOT RELIEVE THE GENERAL CONTRACTOR FROM PERFORMANCE OF THAT WORK TO THE BEST STANDARDS OF THEIR TRADE. THE GENERAL CONTRACTOR SHALL COMPLY WITH PRODUCT AND/OR INSTALLER SUBMITTAL REQUIREMENTS.

2.0 SUBMITTALS

SHOP DRAWINGS AND/OR MANUFACTURER'S PROJECT DATA SUBMITTALS ARE REQUIRED AS NOTED IN THESE SPECIFICATION AS FOLLOWS:

-SUBMIT SAMPLE FOR OWNER'S SELECTION/APPROVAL.

-SUBMIT PRODUCT LITERATURE FOR OWNERS'S SELECTION/APPROVAL.

-GENERAL CONTRACTOR AND ARCHITECT FIELD REVIEW PRIOR TO COVERING UP WORK IF NEEDED.

SUBSTITUTION: EQUAL PRODUCTS ARE PERMITTED UPON PRIOR APPROVAL OF THE OWNER.

3.0 PROJECT CLOSEOUT:

PREPARE A LIST CONTAINING THE GENERAL CONTRACTOR'S NAME, ADDRESS, AND TELEPHONE NUMBERS FOR THE PROJECT. GIVE A COPY OF THIS LIST TO THE OWNER'S REPRESENTATIVE.

DIVISION 6- WOOD, PLASTICS AND COMPOSITES

06 10 00 ROUGH CARPENTRY:

- A. General: The various grades and kinds of lumber hereinafter called for shall be furnished in accordance with the grading rules of the Lumber Manufacturer's Association, conforming to the American Lumber Standards. All lumber shall be kiln dried. All lumber, unless otherwise specified, shall be:

1. Blocking, Framing, Joists, Planks and Board Lumber, Scales, Grounds:

- a. Douglas Fir, Hemlock Yellow Pine, standard or better, 2" x 4" unless otherwise called for on the drawings.
- b. All lumber shall be S4S, dressed and dried to a maximum moisture content of nineteen (19) and stamped "S-DRY".

- c. Concealed blocking for metal studs shall be chemically treated to be fire retardant.

- d. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~

- e. All wood blocking shall be fire-retardant treated.

2. Plywood/OSB

- a. Plywood shall be pressure treated, exterior grade (ext. D.F.P.A.), Group 1 or 2, Grade A-C where exposed on one side, thickness as required, and shall bear the mark of a recognized association or independent inspection agency that maintains continuing control over the quality of the plywood. The mark shall indicate the grade.

- b. Unmarked sheathing will not be used.

- c. Plywood shall have no added formaldehyde.

3. Roof Curbs, Screeds, and Battens:

- a. For all roof curbs, screeds under roof mounted equipment, and battens under tiles:
- i) Redwood No. 1, J & P, B & S
- ii) ~~Redwood No. 1, J & P, B & S~~
- iii) S4S, grade marked.

06 20 00 FINISH CARPENTRY:

- A. Lumber for exposed finish work shall be white birch, except as otherwise specified and must be bound, unwarped, free from cross grains or defects that will impair its strength or appearance and shall be kiln dried. Materials shall be custom grade in accordance with AWI, with grain density sufficient to receive clear finish where required.
- B. Finishing lumber and trim shall not exceed 9% moisture content at time of delivery. Materials shall be delivered labeled and grade identified, and shall conform to the shapes and sizes as shown on the drawings. Finish shall conform to the shapes and sizes as shown on the drawings. Finish lumber and trim shall not be brought into the building until the building is dry. Store in weathertight, dry, well-ventilated enclosures at all times.
- C. Composite wood and agrifiber board shall contain no added urea-formaldehyde. Laminating adhesives used to fabricate on-site and shop-applied shall contain no added urea-formaldehyde.

1.2 ACCESSORIES

- A. Nails: Size and type to suit application.
- B. Bolts, Nuts, Washers, Lags, and Screws: Size and type to suit application; non-corrosive for exterior, high humidity, and treated wood locations; plain finish at other interior locations.

DIVISION 7- THERMAL AND MOISTURE PROTECTION

07 21 00 BUILDING INSULATION:

- 1.1 BOARD INSULATION - EXTRUDED POLYSTYRENE (NOT USED FOR THIS PROJECT).

1.2 ACOUSTICAL INSULATION (Sound attenuation batt where specified on Wall Type Schedule)

- A. Type: Preformed glass fiber acoustical batt, friction fit; ASTM C665, Type II
- B. Facing:
1. Insulation in exposed conditions: Scrim reinforced, foil faced, reflective covering on one side. Provide flanges for continuity of vapor barrier, FSK-25.
2. All other wall conditions: Kraft paper faced covering.
- C. Maximum vapor permeability rating: 1.0 grains/hour/sq. ft.
- D. Width: 16 inches
- E. Minimum thermal resistance, R value: 3.8
- F. Thickness: As required for specified thermal resistance / acoustical rating and as indicated on drawings

1.3 WALL THERMAL BATT INSULATION

- A. Type: Preformed glass fiber thermal batt, friction fit; ASTM C665, Type II
- B. Facing:
1. Insulation in exposed conditions: Continuous scrim reinforced, foil faced, reflective covering on one side of studs. Provide flanges for continuity of vapor barrier, FSK-25.
2. All other wall conditions: Kraft paper faced covering.
- C. Maximum vapor permeability rating: 1.0 grains/hour/sq. ft.
- D. Minimum thermal resistance, R value: 3.5 / inch
- E. Thickness: As required for specified thermal resistance and as indicated on drawings

07 92 00 JOINT SEALANTS:

1.1 SEALANTS

- A. Type A - Polyurethane, FS TT-S-00227, Type I, Class A:
1. Multi-component, self-leveling.
2. Movement: 25 percent.
3. Joint size limitation:
- a. Minimum: 3/8 by 3/8 inch
- b. Maximum: No width limitation, 2 inch deep
4. Life expectancy: 10 years
- B. Type B - Silicone sealant, FS TT-S-001543, Class A:
1. Single component, low modulus, ultraviolet resistant.
2. Movement: 100 percent expansion, 50 percent contraction.
3. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
4. Joint size limitation:
- a. Minimum: 1/8 by 1/8 inch
- b. Maximum: 1 inch wide by 2 inch deep
5. Life expectancy: 30 years.
- C. Type C - Pectora 895
1. High performing, medium modulus, neutral cure silicone sealant
2. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
3. Joint size limitation:
- a. Minimum: 1/4 by 1/4 inch
- b. Maximum: 2 inch by 3/8 inch thick
4. Life expectancy: 10 years.
- D. Type D - Acrylic latex, ASTM C 834:
1. Single component, fast setting, paintable.
2. Movement: 12 percent.
3. Joint size limitation:
- a. Minimum: 1/4 by 1/4 inch
- b. Maximum: 3/4 inch wide by 2 inch deep
4. Life expectancy: 10 years.
- E. Type E - Acoustical sealant, ASTM C 919:
1. Non-hardening.
2. Joint limitation: 2 inch maximum.
3. Life expectancy: 20 years.

DIVISION 8- OPENINGS

08 11 00 HOLLOW METAL DOORS AND FRAMES:

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.1 STANDARD HOLLOW METAL DOORS

General: Provide 1-3/4 inch doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~

- A. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
- B. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~

1.2 STANDARD HOLLOW METAL FRAMES

- A. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
- B. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~

1.1 LOUVERS

- A. Metal Louvers: Door manufacturer's standard metal louvers unless otherwise indicated.
1. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
2. Metal and Finish: Galvanized steel, 0.040 inch thick, factory primed for paint finish with baked enamel or powder coated finish. Match pre-finished door paint color where applicable.

1.1 LIGHT OPENINGS AND GLAZING

- A. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints at fabricator's shop. Fixed and removable stops to allow multiple glazed lites each to be removed independently. Coordinate frame rabbet widths between fixed and removable stops with the type of glazing and installation indicated.
- B. Moldings for Glazed Lites in Doors and Loose Stops for Glazed Lites in Frames: Minimum 20 gauge thick, fabricated from same material as door face sheet in which they are installed.
- C. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated. Provide fixed frame moldings and stops on outside of exterior and on secure side of interior doors and frames
- D. Preformed Metal Frames for Light Openings: Manufacturer's standard frame formed of 0.048-inch-thick, cold rolled steel sheet; with baked enamel or powder coated finish; and approved for use in doors of fire protection rating indicated. Match pre-finished door paint color where applicable.
- E. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
1. Factory Glazing: Factory install glazing in doors as indicated. Doors with factory installed glass to include all of the required glazing material.

08 14 00 FLUSH WOOD DOORS:

- A. Interior Solid Core Doors:
1. Match between Veneer Leaves: Book match.
2. Assembly of Veneer Leaves on Door Faces:
- a. Running Match.
3. ~~Unmarked blocking for metal studs shall be chemically treated to be fire retardant.~~
4. Transom Match: Continuous match.
5. Vertical Edges: Matching same species as faces. Wood or composite material, one piece, laminated, or veneered. Minimum requirements per WDMA section P-1, Performance Standards for Architectural Wood Flush Doors.
6. Horizontal Edges: Solid wood or structural composite material meeting the minimum requirements per WDMA section P-1, Performance Standards for Architectural Wood Flush Doors
7. Construction: Five plies. Stiles and rails are bonded to core, then entire unit sanded before applying face veneers.
8. At doors over 40% of the face cut-out for lights and or louvers, furnish engineered composite lumber core.
9. Rabbited wood jambs with clamshell casing.

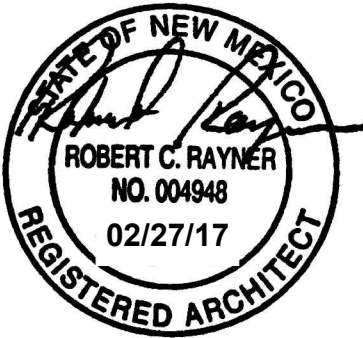
08 31 00 ACCESS DOORS AND FRAMES:

1.1 MANUFACTURERS

- A. Access Doors:
1. Babcock-Davis Hatchways, A Cierra Products Company  
1701 Madison Street NE, Minneapolis, Minnesota 55413  
Telephone: (888) 412-3726 or (612) 706-1386
2. Acudor Products, Inc.  
80 Little Falls Road, Fairfield, New Jersey 07004  
Telephone: (800) 722-0501 or (973) 575-5120
3. The Bilco Company  
Post Office Box 1203, New Haven, Connecticut 06505-1203  
Telephone: (203) 934-6363

1.2 ACCESS DOOR UNITS

- A. Wall and Ceiling Door and Frame Units (Refer to Drawings for specific locations and sizes, and as required to provide access to existing and new mechanical and electrical work):
1. Flush Door: Formed steel, Model UF-5000 by Acudor Products
2. Recessed Door: Formed steel, Model UF-5020 by Acudor Products
- B. Insulated Exterior Access Door: Galvanized Steel, Model MX with keyed latch by Karp Associates, sizes as identified on the drawings.
- C. Prime coat with alkyd primer. Field painted.



R<sup>2</sup>ARCHITECTURAL DESIGN  
730 SAN MATEO BLVD SE, SUITE 1  
ALBUQUERQUE, NEW MEXICO 87108  
TEL: 505.792.6224 FAX: 888.892.5814

DS	MC	01/09/17	AS SHOWN
DRAWN BY:	CHECKED BY:	DATE:	SCALE:

SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM  
SPECIFICATIONS

-SHEET-

A001

ARCHITECTURAL OUTLINE SPECIFICATIONS (CONTINUED)

08 71 00 DOOR HARDWARE:

1. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Requirements for Buildings and Facilities," 2010 Edition, published by the International Building Code, Inc., 530 North Dearborn Street, Chicago, IL 60610, and the 2010 International Building Code, published by International Code Council, Inc., 1115 North Dearborn Street, Chicago, IL 60610.
- a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
- b. Door Closers: Comply with the following maximum opening-force requirements indicated:
- 1) Interior Hinged Doors: 5 lbf applied perpendicular to door.
- 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
- c. Thresholds: Not more than 1/2 inch high. Bevel raised thresholds with a slope of not more than 1:2.
2. Door Hardware Schedule: Refer to Sheet A-102 for Door Hardware Schedule and associated requirements.
- a. Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
- b. Thresholds: Not more than 1/2 inch high.
3. Fire-Rated Door Assemblies: Provide door hardware for assemblies complying with NFPA 201 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 201 and UL 10C. Provide door hardware for assemblies complying with NFPA 201 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 201 and UL 10C.
- a. Test Pressure: Positive pressure labeling.

1.1 DOOR HARDWARE SCHEDULE

- A. REFER TO SHEET A-102 FOR DOOR HARDWARE SCHEDULE AND ASSOCIATED REQUIREMENTS.

**DIVISION 9- FINISHES**

09 22 16 NON-STRUCTURAL METAL FRAMING:

1.1 STRUCTURAL COMPONENTS

- A. Channel:
1. Fabrication: Cold-rolled copper, alloy steel, painted
2. Sizes:
- a. 3/4" weighing 300 pounds/1000 feet
- b. 1-1/2" weighing 475 pounds/1000 feet
- B. Hanger Wire:
1. 9 gauge galvanized, annealed steel wire
2. FS QQ-W-461, Class 1
3. Delivered in bundles
4. Coiled wire is not acceptable.
- C. Tie Wire: 18 gauge galvanized, annealed steel wire
- D. Furring Channel:
1. Fabrication: Cold-formed steel, galvanized
2. Size: 7/8" x 2-1/4" with a 1-3/8" flange
- E. Resilient Channel:
1. Fabrication: Cold-formed steel, galvanized
- F. Fasteners: As recommended for the purpose intended

1.2 METAL ACCESSORIES

- A. Corner Beads:
1. 1/2" wide, 3/4" radius, expanded metal flange
2. Bull nose, 3/4" radius with expanded metal flange.
- B. Casing Bead: Modified square end with expanded flange
- C. Cornerites: 2.5 pounds per square yard expanded metal lath, galvanized
- D. Expansion Bead: Keene No. 15
- E. Metal Base: 18 gauge cold rolled steel, prime coat painted
- F. J Stops: 3/4" and 1"

09 29 00 GYPSUM BOARD:

1.1 ACCEPTABLE MANUFACTURERS

- A. Gold Bond Building Products, National Gypsum Company, Charlotte, North Carolina; 704-365-7300.
- B. United States Gypsum Company, Chicago, Illinois; 312-606-5756.
- C. Temple-Inland, Post Office Drawer N, Diboll, Texas 75941; (800) 231-6060.
- D. American Gypsum Company, 7850 Jefferson N.E., Albuquerque, New Mexico 87109; 505-823-2022.

1.1 GYPSUM BOARD MATERIALS

- A. Gypsum Board: ASTM C36, 5/8 inch 1/2 inch thick (where specified on Drawings), 4 feet wide, maximum permissible length, ends square cut, and tapered and beveled edges.
- B. Gypsum Board: 5/8 inch thick fire rated gypsum board for shaft wall construction.
- C. Moisture resistant, fire rated gypsum board: ASTM C630, 5/8 inch thick, 4 feet wide, maximum permissible length, ends square cut, tapered and beveled edges.
- D. Gypsum Sheathing Board: ASTM-79, 5/8" thick gypsum core sheathing panel with additives to enhance the water resistance of the core, surfaced with water repellent paper on front, back, and long edges, 48 inches wide x 8 feet long, square edges.

1.1 ACCESSORIES

- A. Corner Beads: Galvanized steel with 1-1/4 inches knurled flanges.
- B. Casing Beads: Galvanized steel, L-shaped, with 1 inch knurled flange and height to match thickness of gypsum board. Where kerfed joints are shown at jambs or elsewhere, provide trim with special leg designed for insertion into jamb slot. On all exposed edges of wallboard, provide semi-finishing type casing beads with square nose. Semi-finishing type beads shall require joint compound treatment.
- C. Joint Materials: ASTM C475; reinforcing tape, 2" wide, perforated; joint compound; adhesive; water; and fasteners.
- D. Joint Compounds: Pre-mixed or job-mixed products. Compounds shall be single component compound suitable for both bedding and finishing joints.
- E. Textured Finish Materials: Latex based texturing material. Two (2) textures shall be selected by the Architect.
- F. Control Joints: USG #093
- G. Viscoelastic decoupler where specified: pinta acoustic PROSPEC Decibel Drop Viscoelastic Damping Compound, applied in conformance with manufacturer's published instructions between two layers of gypsum board (floor to deck). Refer to manufacturer's specifications for required application and coverage data.

09 65 13 RESILIENT BASE AND ACCESSORIES:

1.1 RESILIENT BASE

- A. Manufacturers:
- a. Johnsonite
- b. Flexco, Inc.
- c. Armstrong World Industries, Inc.
- d. Roppe Corporation
- B. Minimum Thickness: 0.125 inch.
- C. Height: 4 inches, or as indicated on Drawings (6" at "wet" kitchen areas).
- D. Lengths: Coils in manufacturer's standard length.
- E. Outside Corners: Preformed.
- F. Inside Corners: Preformed.
- H. Finish: As selected by Architect from manufacturer's full range.
- I. Color: As specified on Drawings.

09 90 00 PAINTING:

1.1 GENERAL

1. Materials selected for coating system for each type surface shall be the product of a single manufacturer.
2. Paint: Provide paint system for each type surface shall be the product of a single manufacturer.
3. Unless specifically approved as required under this section, the paints shall be the first quality manufactured line, shall meet all requirements of this specification, and shall be manufactured by companies specified or by an acceptable substitute. Only oils, thinners, and driers as recommended by the paint products which are intended for use on the project shall be brought to the site.
4. The paint must meet or exceed the following standards as determined by these test methods: Opacity (TT-P-141 '4121), Reflectance (TT-P-141 '6121), and Scrubbability (ASTM D2486).

1.2 COMPATIBILITY

- A. All paint materials shall be compatible in use; finish coats shall be compatible with prime coats.
- B. Thinners shall be only those recommended for that purpose by manufacturer of materials to be thinned.

2.0 COLORS

- A. As specified on Drawings (or as Selected by Owner if not otherwise indicated, up to 3 accent colors).

**DIVISION 10- SPECIALTIES**

10 26 00 WALL AND DOOR PROTECTION:

1.1 MANUFACTURERS

- A. Wall and Corner Guards:
1. IPC Door and Wall Protection Systems
2. Arden Architectural Specialties, Inc.
3. Construction Specialties, Inc.

1.2 COMPONENTS

- A. Corner Guard - Surface Mounted: Extruded one-piece unit, installed with screws.
1. Material: Stainless Steel
2. Size: 1-1/2 inches x 1-1/2 inches x 16 gauge; 90 degree profile
3. Length: 6 feet
4. Finish: 430 Standard Grade, Smooth

1.3 INSTALLATION

1. General Contractor shall provide corner guards at all exposed outside corners throughout the project area (provide appropriate mounting for each substrate) as part of **Base Bid**.

10 44 13 FIRE EXTINGUISHERS, CABINETS AND ACCESSORIES:

1.1 FIRE EXTINGUISHERS

- A. UL-rated 2A-10BC, 5 lb. Fire Extinguisher
- B. Wet Chemical Class K Fire Extinguisher

1. Standard mounting bracket

1.2 CABINETS

- A. Recessed/Semi-recessed out.
1. Stainless Steel Fire Extinguisher Cabinet Model # M3216-RA (Larsen)
- a. Tub Size: (I.D.) 16" wide x 32" high x 8" deep
- b. Trim: 4" Rolled Edge Semi-Recessed
- c. Trim & Door Material: Stainless Steel
- d. Door Style: Horizontal Duo
- e. Door Glazing: Clear Tempered Safety Glass
- f. Die Cut Lettering Style and Color: Type A, Black
- B. Surface Mount (at any existing wall locations)
1. Stainless Steel Fire Extinguisher Cabinet Model #1033-S21 (Larsen)
- a. V-Tube Fire Extinguisher Cabinet Model #1033-S21 (Larsen)
- b. Trim: Surface Mounted
- c. Trim and Door Material: Stainless Steel
- d. Door Style: Horizontal Duo
- e. Door Glazing: Clear Tempered Safety Glass
- f. Die Cut Lettering Style and Color: Type A, Black

**DIVISION 12- FURNISHINGS**

12 30 00 CUSTOM PRE MANUFACTURED CASEWORK:

- A. Prior to commencement of work under this section, submit copies of shop drawings.
- B. Submit plans and elevations indicating materials, profiles, assembly methods, joint details, fastening methods, and schedule of finishes. Include hardware cut sheets and lock schedules.
- C. Submit drawings with dimensions in units of feet and inches.
- D. Where casework is indicated to be fitted to other construction, check actual dimensions of other construction by accurate field measurements before fabrication, and show recorded measurements on final shop drawings.

1.01 SHEET MATERIALS

- A. Softwood Plywood: Graded in accordance with AWI Grade Custom.
- B. Wood Particleboard and/or fiberboard: Shall be Industrial Grade, Medium Density, with no added urea-formaldehyde.
- C. Thermoset Decorative Overlay: Particleboard or medium density fiberboard with no added urea-formaldehyde; surface of thermally fused, melamine-impregnated decorative paper complying with LMA SAT-1. Color: White.

1.02 LAMINATE COLORS AND PATTERNS

- A. Unless otherwise indicated on Drawings, colors to be selected by Owner from Manufacturer's standard color selection. In the absence of a specified laminate pattern and/or color, furnish non-premium-priced decorative laminates from manufacturer's standard selections, maximum of four different colors and/or patterns per project, limited to one color/pattern for cabinet and one color/pattern for countertop per elevation. When specified, furnish multiple patterns, colors and/or specialty materials.

1.03 HARDWARE

1. Hinges: Provide hinges from one of the following:
- a. SALICE - Use No. C2RFA99 165 degree full overlay with self-closing hinge with dowels.
- b. GRASS - Snap-on Series 3800 series 165 degree No. 3913 with one No. 3903 self-closing hinge per door.
- c. BLUM - Full concealed 176 degree No. 9066, with one No. 91660 self-closing hinge per door.
2. Pulls
- a. Aluminum wire pull - 5-1/2 inch.
- b. Substitutions for the above product shall be submitted to Owner for approval prior to issuance of Notice to Proceed.
3. Catches: One magnetic catch for each door on base and wall cabinets. Two magnetic catches for each door on tall cabinets. Minimum of 5 lb. pull.



R<sup>2</sup> ARCHITECTURAL DESIGN  
730 SAN MATEO BLVD SE, SUITE 1  
ALBUQUERQUE, NEW MEXICO 87108  
TEL: 505.792.6224 FAX: 888.892.5814

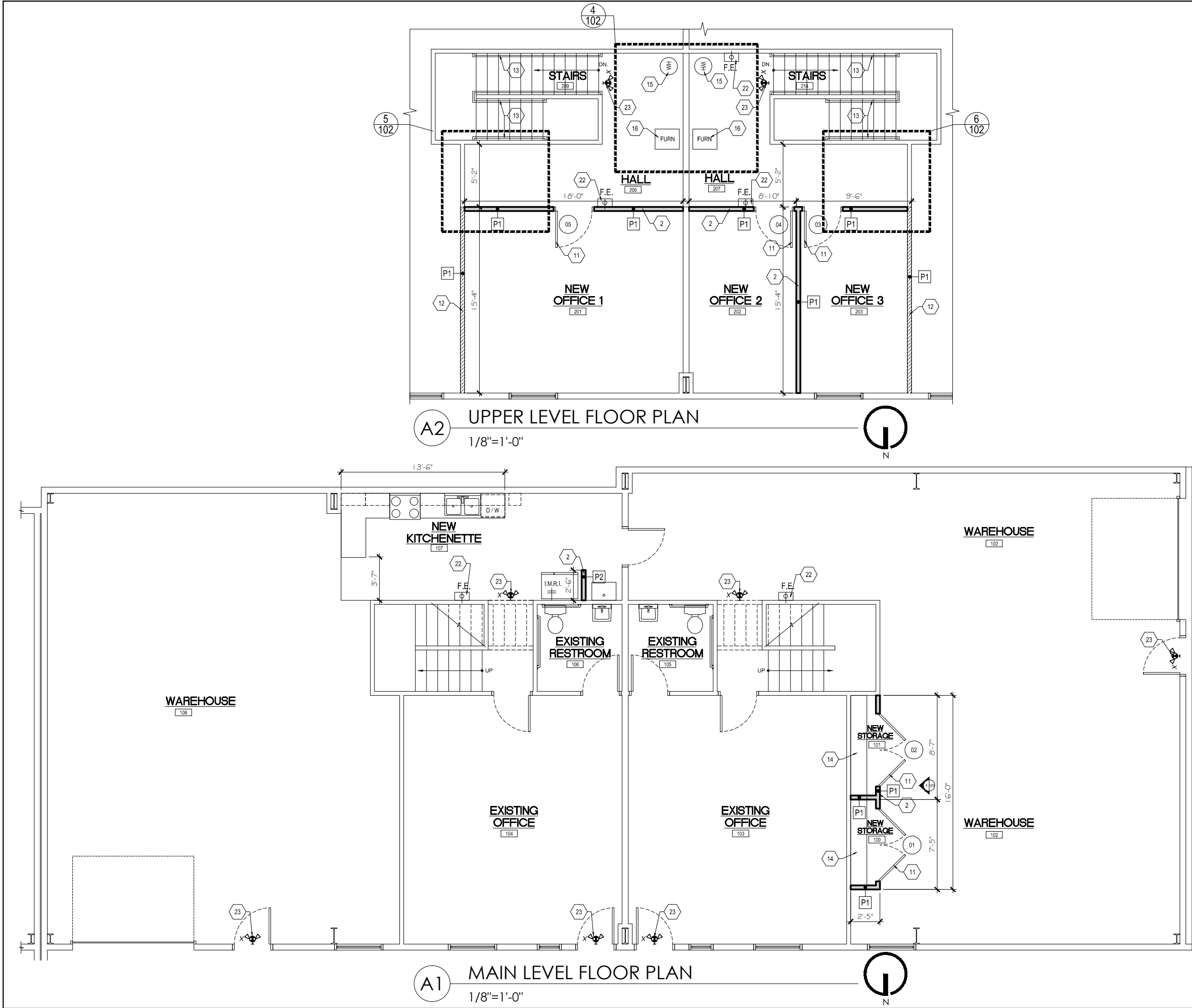
DS MC  
DRAWN BY: CHECKED BY:  
DATE: SCALE:  
01/09/17 AS SHOWN

SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM

SPECIFICATIONS

-SHEET-

A002



KEY NOTES (EXISTING FLOOR PLAN) :

1. NEW FLOOR SINK.
2. NEW WALL. SEE WALL TYPE & FINISH SCHEDULES.
3. MOVE EXISTING REFRIGERATOR AND ICE MAKER WATER LINE.
4. EXISTING WALL MOUNTED COMPUTER SERVER BOX.
5. NEW DISHWASHER.
6. NEW SINK WITH DISPOSAL.
7. NEW STOVE WITH MICROWAVE / HOOD.
8. NEW BASE CABINETS WITH COUNTER TOP.
9. NEW UPPER CABINETS.
10. NEW CERAMIC TILE FLOOR.
11. NEW DOORS.
12. EXISTING HALF WALL TO BE REMOVED REPLACE WITH NEW WALL.
13. BRING HANDRAIL UP TO CODE.
14. NEW 3 - 16" SHELVES.
15. EXISTING ELECTRIC WATER HEATER.
16. EXISTING FURNACE.
17. NOT USED.
18. NEW 3 - 12" SHELVES.
19. UPPER CABINET.
20. UNDERSINK PIPE COVER (REMOVABLE PANEL).
21. BASE CABINET WITH 36" LAMINATED TOP AS SELECTED.
22. TYPE 2A-10-BC FIRE EXTINGUISHER IN SEMI-RECESSED CABINET.
23. WALL MOUNT LED EXIT LIGHTING / SIGNAGE W/ LED EMERGENCY LIGHTING.

- NEW WALL
- EXISTING WALL
- WALL TO BE REMOVED AND BUILD NEW

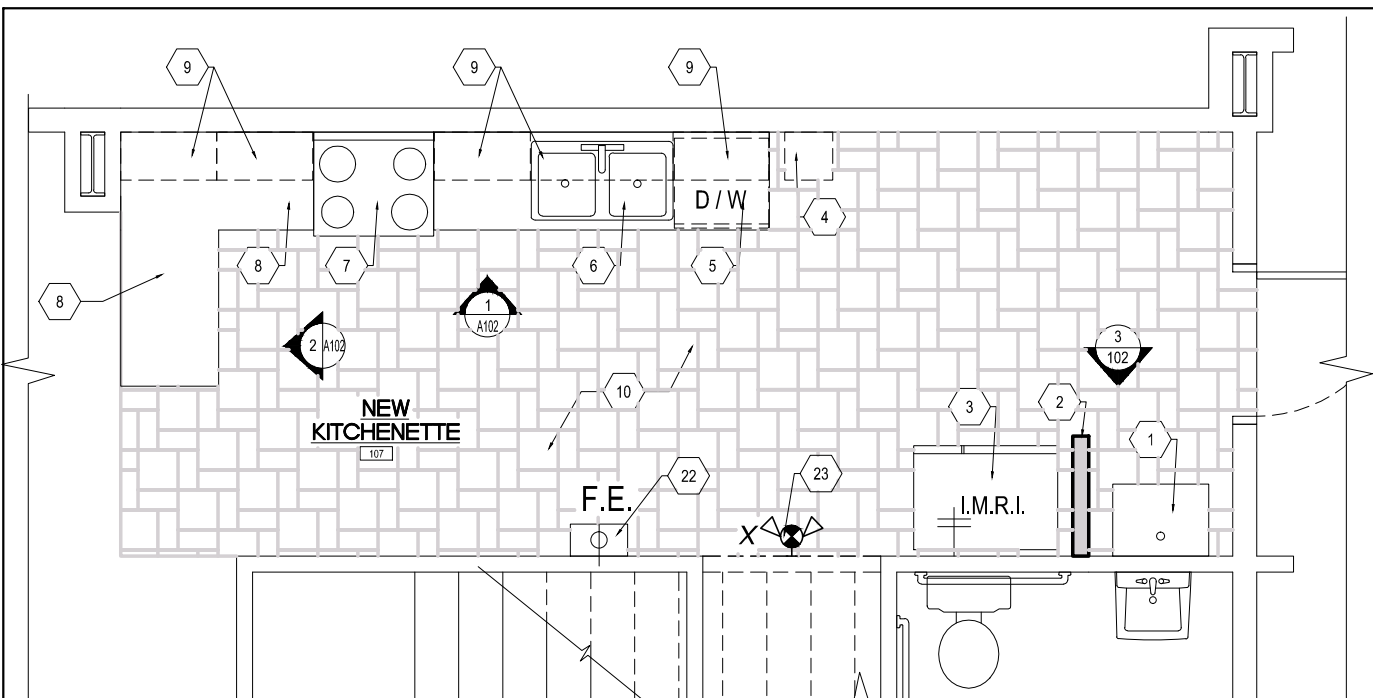


R <sup>2</sup> ARCHITECTURAL DESIGN 730 SAN MATEO BLVD SE, SUITE 1 ALBUQUERQUE, NEW MEXICO 87108 TEL: 505.792.6224 FAX: 888.892.5814			
DS	RR	02/27/17	AS SHOWN
DRAWN BY:	CHECKED BY:	DATE:	SCALE:
SANTA FE MOUNTAIN CENTER 1160 PARKWAY DRIVE SUITES A & B SANTA FE, NM		MAIN LEVEL FLOOR PLAN & UPPER LEVEL FLOOR PLAN	

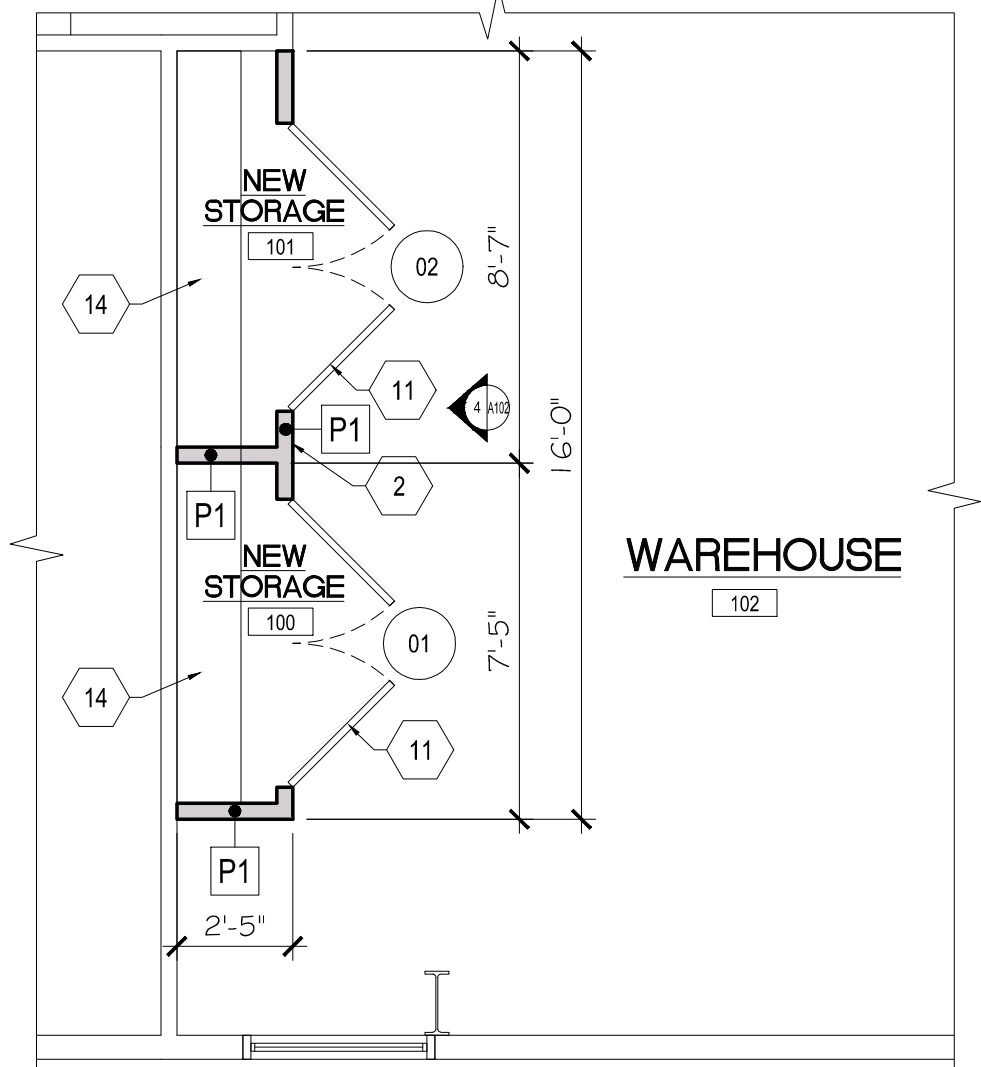
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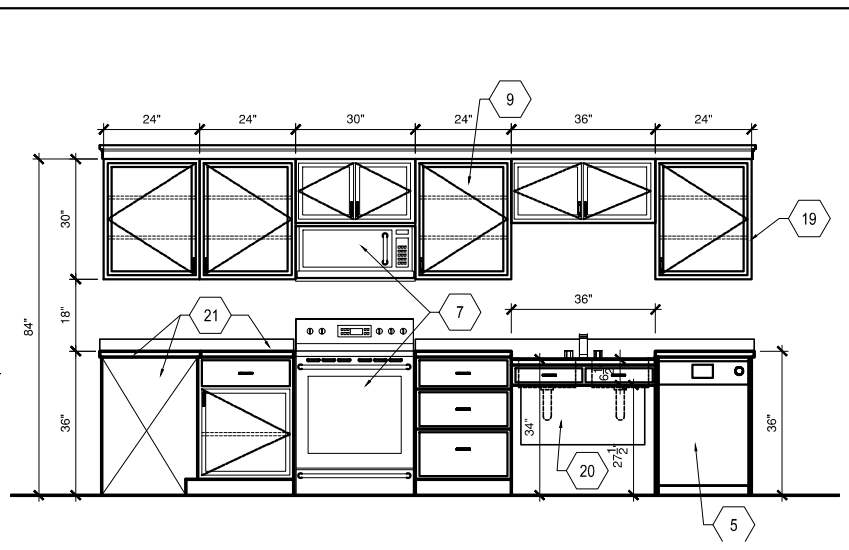




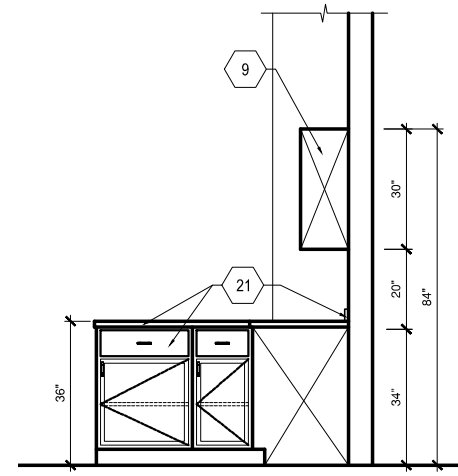
A3 MAINLEVEL FLOOR PLAN ( KITCHENETTE ) ROOM 107  
1/4"=1'-0"



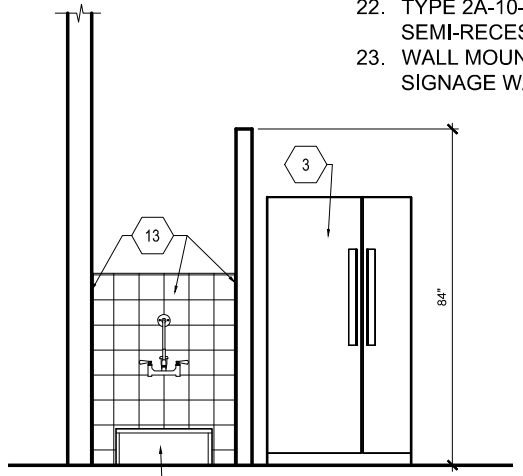
A4 MAIN LEVEL FLOOR PLAN (STROAGE CLOSET) ROOM 102  
1/4"=1'-0"



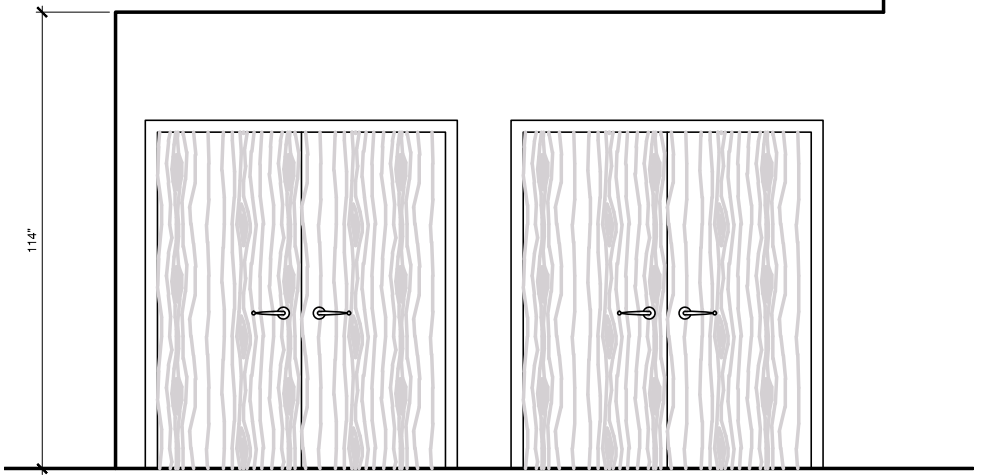
1 ( KITCHENETTE ) ROOM 107  
SCALE:1/4"= 1'-0"



2 ( KITCHENETTE ) ROOM 107  
SCALE:1/4"= 1'-0"



3 ( KITCHENETTE ) ROOM 107  
SCALE:1/4"= 1'-0"



4 ( STORAGE ) ROOM 101  
SCALE:1/4"= 1'-0"

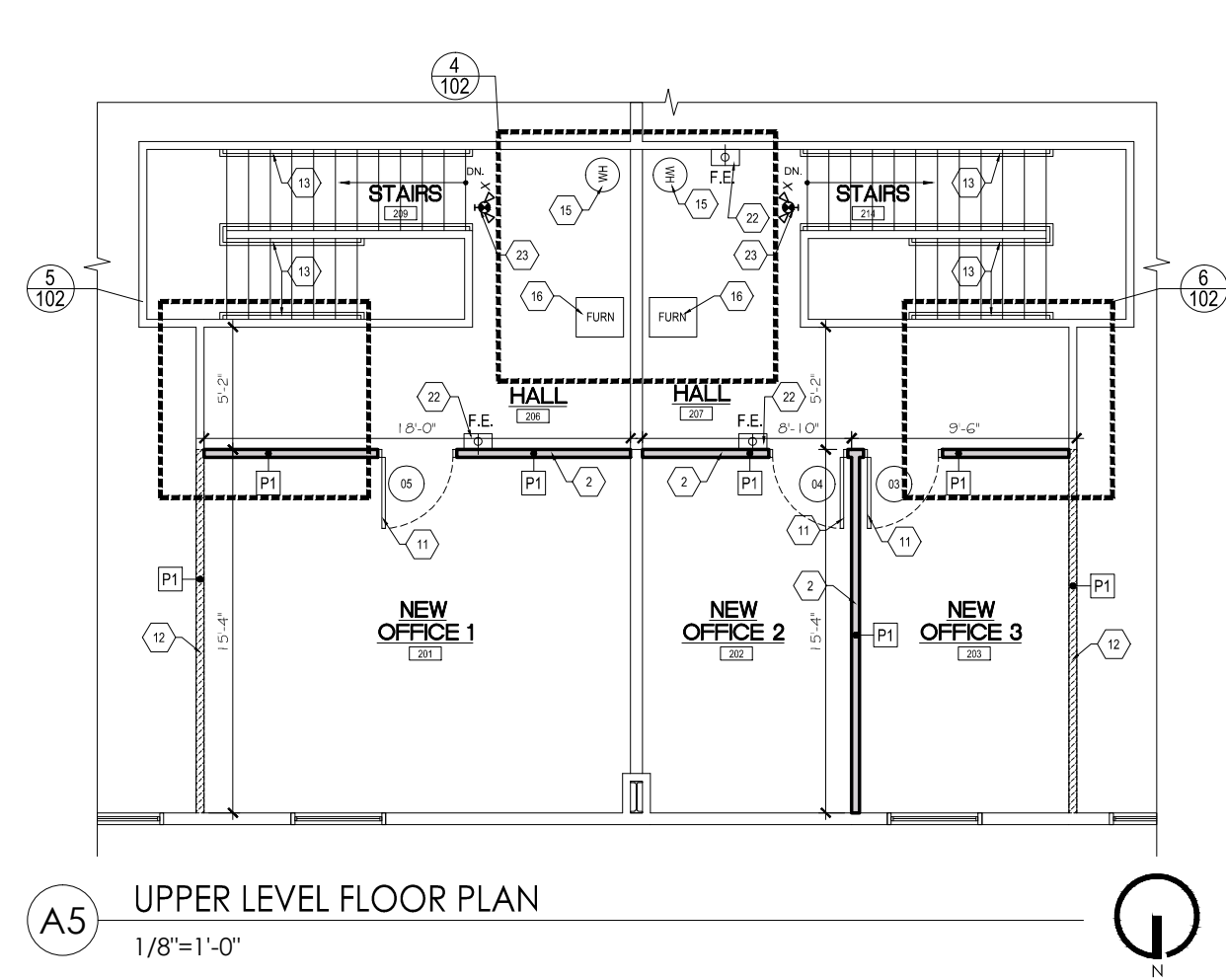
KEY NOTES (EXISTING FLOOR PLAN) :

1. NEW FLOOR SINK.
2. NEW WALL SEE WALL TYPE & FINISH SCHEDULES.
3. MOVE EXISTING REFRIGERATOR AND ICE MAKER WATER LINE.
4. EXISTING WALL MOUNTED COMPUTER SERVER BOX .
5. NEW DISHWASHER.
6. NEW SINK WITH DISPOSAL.
7. NEW STOVE WITH MICROWAVE / HOOD.
8. NEW BASE CABINETS WITH COUNTER TOP.
9. NEW UPPER CABINETS.
10. NEW CERAMIC TILE FLOOR.
11. NEW DOORS.
12. EXISTING HALF WALL TO BE REMOVED REPLACE WITH NEW WALL
13. BRING HANDRAIL UP TO CODE.
14. NEW 3 - 16" SHELVES.
15. EXISTING ELECTRIC WATER HEATER.
16. EXISTING FURNACE
17. NOT USED
18. NEW 3 - 12" SHELVES.
19. UPPER CABINET
20. UNDERSINK PIPE COVER (REMOVABLE PANEL)
21. BASE CABINET WITH 36" LAMINATED TOP AS SELECTED
22. TYPE 2A-10-BC FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
23. WALL MOUNT LED EXIT LIGHTING / SIGNAGE W/ LED EMERGENCY LIGHTING.

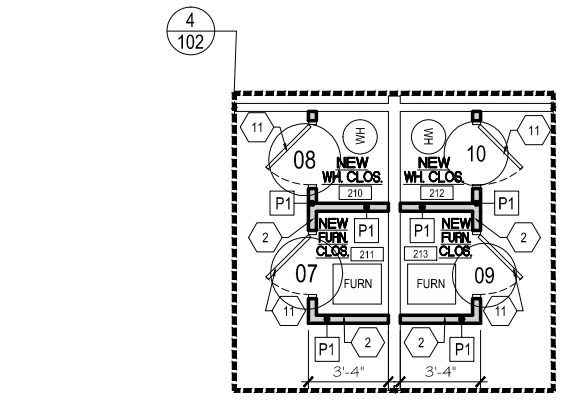
NEW WALL  
EXISTING WALL  
WALL TO BE REMOVED AND BUILD NEW



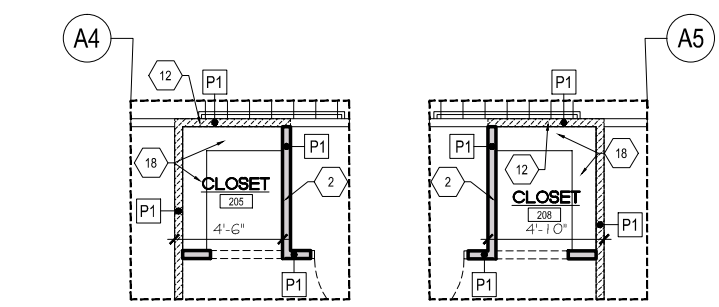
SANTA FE MOUNTAIN CENTER 1160 PARKWAY DRIVE SUITES A & B SANTA FE, NM		DRAWN BY:	DS	R <sup>2</sup> ARCHITECTURAL DESIGN 730 SAN MATEO BLVD SE, SUITE 1 ALBUQUERQUE, NEW MEXICO 87108 TEL: 505.792.6224 FAX: 888.892.5814
MAIN LEVEL FLOOR PLAN CABINET ELEVATIONS MAIN LEVEL FLOOR PLAN STORAGE	CHECKED BY:	MC		
	DATE:	01/09/17		
	SCALE:	AS SHOWN		
-SHEET- A101				



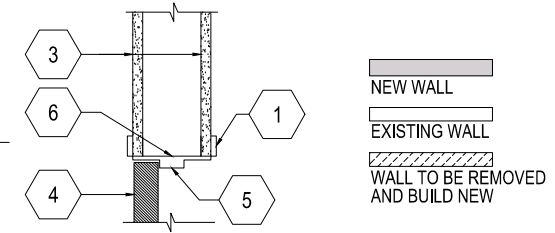
A5 UPPER LEVEL FLOOR PLAN  
1/8"=1'-0"



4 ADDITIVE ALTERNATE (FURN. & WH CLOSET)  
1/8"=1'-0"



5 ADDITIVE ALTERNATE (CLOSET)  
1/8"=1'-0"



KEY NOTES (EXISTING FLOOR PLAN) :

1. NEW FLOOR SINK.
2. NEW WALL SEE WALL TYPE & FINISH SCHEDULES.
3. MOVE EXISTING REFRIGERATOR AND ICE MAKER WATER LINE.
4. EXISTING WALL MOUNTED COMPUTER SERVER BOX .
5. NEW DISHWASHER.
6. NEW SINK WITH DISPOSAL.
7. NEW STOVE WITH MICROWAVE / HOOD.
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730 SAN MATEO BLVD SE, SUITE 1  
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DS	MC	01/09/17	AS SHOWN
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SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM

UPPER LEVEL FLOOR PLAN & DOOR SCHEULE  
ADDITIVE ALTERNATE (CLOSET) WALL TYPE LEGEND

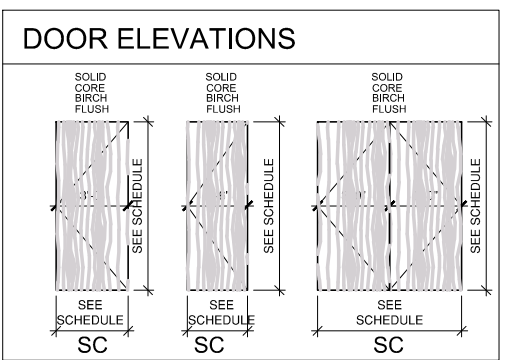
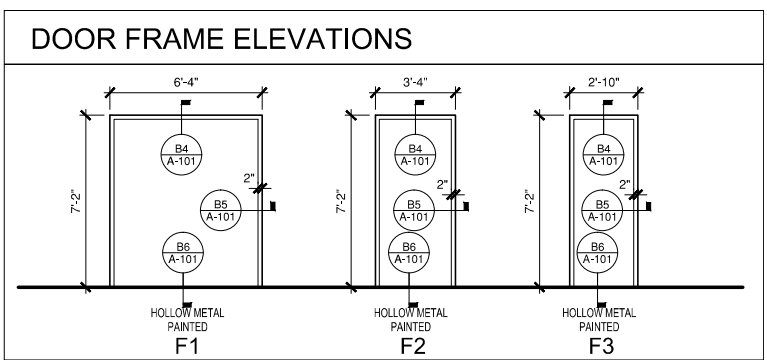
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A102

WALL TYPES LEGEND	
P1	INTERIOR PARTITION (NON BEARING)
P2	INTERIOR PARTITION (NON BEARING)
P3	INTERIOR PARTITION (NON BEARING)

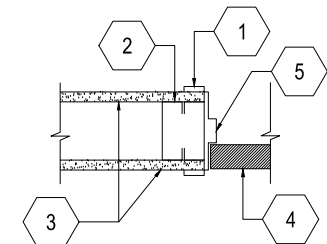
DOOR SCHEDULE											
#	RM	LOCATION	SIZE	MATERIAL	TYPE	GLASS	INT/EXT	MATERIAL	TYPE	FINISH	HDWR
1	100	STORAGE	6'-0" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F1	WOOD	PAINT
2	101	STORAGE	6'-0" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F1	WOOD	PAINT
3	203	OFFICE #3	3'-0" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F2	WOOD	PAINT
4	202	OFFICE #2	3'-0" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F2	WOOD	PAINT
5	201	OFFICE #1	3'-0" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F2	WOOD	PAINT
6	211	FURNACE CLOSET	2'-6" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F3	WOOD	PAINT
7	210	WH. CLOSET	2'-6" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F3	WOOD	PAINT
8	213	FURNACE CLOSET	2'-6" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F3	WOOD	PAINT
9	210	WH. CLOSET	2'-6" x 7'-0" x 1-3/4"	S.C. WOOD	SC		STAIN	WOOD	F3	WOOD	PAINT
HARDWARE SCHEDULE											
SET #1				SET #2				SET #3			
PRIVACY SET, 1 1/2 PR				PASSAGE SET, 1 1/2 PR							
HINGES, WALL STOP				HINGES, WALL STOP							

NOTES: - DOOR HARDWARE SHALL BE EASILY GRASPABLE WITH ONE HAND.  
- ALL DOORS SHALL HAVE MAX 5 LB PUSH/PULL.  
- DOOR THRESHOLDS TO BE MAX. 1/2" HIGH W/ 45 DEG. BEVELED EDGE.

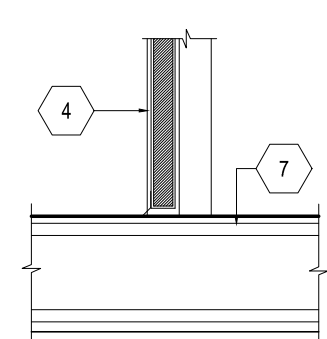
- KEY NOTES (DOOR DETAILS) :
1. SNAP LOCK TRIM
  2. 20 GA METAL STUDS @ JAMB. REFER TO PARTITION TYPES FOR STUD DEPTH.
  3. 3/8" TYPE "X" GYPSUM BOARD; TAPE, TEXTURE, AND PAINT AS PER FINISH PLAN
  4. DOOR AS SCHEDULED
  5. "REDI-FRAME" DOOR FRAME.
  6. 20 GA METAL TRACK REFER TO PARTITION TYPES FOR STUD DEPTH
  7. FLOOR SYSTEM
  8. BACKER ROD AND SEALANT BOTH SIDES, TYPICAL.



B4 HEAD (TYPICAL INTERIOR "REDI-FRAME" DOOR FRAME)  
SCALE = 1" = 1'-0"

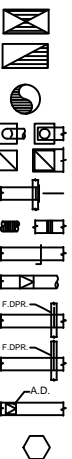
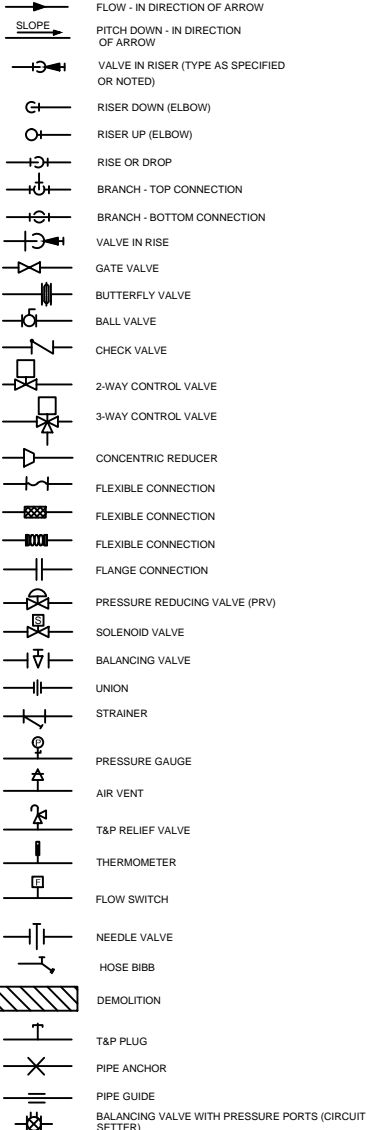

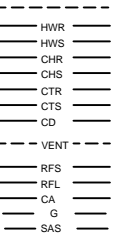


B5 JAMB (TYPICAL INTERIOR "REDI-FRAME" DOOR FRAME)  
SCALE = 1" = 1'-0"



B6 THRESHOLD  
SCALE = 1" = 1'-0"



MECHANICAL/PLUMBING LEGEND		
SYMBOL	DESCRIPTION	PIPING SYMBOLS
	DUCTWORK SYMBOLS	
	SECTION THROUGH RECTANGULAR SUPPLY DUCT	
	SECTION THROUGH RECTANGULAR EXHAUST OR RETURN DUCT	
	SECTION THROUGH ROUND DUCT, SUPPLY OR EXHAUST AS NOTED	
	CEILING SUPPLY AIR DIFFUSER	
	RETURN AIR GRILLE OR EXHAUST REGISTER	
	SIDEWALL SUPPLY REGISTER AT WALL	
	FLEXIBLE DUCT, SIZE AS SHOWN	
	HAND (VOLUME) DAMPER IN DUCT	
	RECTANGULAR-TO-ROUND TRANSITION	
	VERTICAL FIRE DAMPER IN DUCT AT FIRE PARTITION	
	HORIZONTAL FIRE DAMPER AT FLOOR PENETRATION	
	CONTROLS SYMBOLS	
	THERMOSTAT	
	DAMPER MOTOR	
	IONIZATION SMOKE DETECTOR	
	FREEZESTAT	
	TEMPERATURE SENSOR	
	HUMIDITY SENSOR	
	DEW POINT SENSOR	
	STATIC PRESSURE SENSOR	
	FLOW SWITCH	
	PIPING SYMBOLS	
	EXISTING PIPING	
	HOT WATER RETURN	
	HOT WATER SUPPLY	
	CHILLED WATER RETURN	
	CHILLED WATER SUPPLY	
	COOLING TOWER WATER SUPPLY	
	COOLING TOWER WATER RETURN	
	CONDENSATE	
	VENT	

MECHANICAL/PLUMBING ABBREVIATIONS			
ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
AFF	ABOVE FINISHED FLOOR	J-BOX	JUNCTION BOX
AFG	ABOVE FINISHED GRADE	LAT	LEAVING AIR TEMPERATURE
AHJ	AUTHORITY HAVING JURISDICTION	LDBT	LEAVING DRY BULB TEMPERATURE
ARCH	ARCHITECT	LWBT	LEAVING WET BULB TEMPERATURE
C/C	COOLING COIL	LWT	LEAVING WATER TEMPERATURE
CFH	CUBIC FEET PER HOUR	MAT	MIXED AIR TEMPERATURE
CFM	CUBIC FEET PER MINUTE	MBH	THOUSAND BTU PER HOUR
CL	CENTERLINE	MCA	MINIMUM CIRCUIT AMPACITY
CLG	CEILING	MH	MANHOLE
CO	CARBON MONOXIDE	MISC	MISCELLANEOUS
CO	CLEANOUT	MOCP	MAXIMUM OVERCURRENT PROTECTION
COTG	CLEANOUT TO GRADE	NC	NOISE CRITERIA
CO2	CARBON DIOXIDE	NEC	NATIONAL ELECTRICAL CODE
CU	CONDENSING UNIT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CW	COLD WATER	NTS	NOT TO SCALE
DB	DRY BULB	OA	OUTSIDE AIR
DDC	DIRECT DIGITAL CONTROLS	OFD	OVERFLOW DRAIN
DEG F	DEGREES FAHRENHEIT	PC	PLUMBING CONTRACTOR
DS	DOWNSPOUT	PPM	PARTS PER MILLION
DWH	DOMESTIC WATER HEATER	PRV	PRESSURE REDUCING VALVE
EC	ELECTRICAL CONTRACTOR	PSI	POUNDS PER SQUARE INCH
EDBT	ENTERING DRY BULB TEMPERATURE	QA	QUALITY ASSURANCE
EF	EXHAUST FAN	QC	QUALITY CONTROL
EL	ELEVATION	R	RADIUS
ETC	ET CETERA	RA	RETURN AIR
EWBT	ENTERING WET BULB TEMPERATURE	RAT	RETURN AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE	RD	ROOF DRAIN
FCO	FLOOR CLEAN-OUT	RH	RELATIVE HUMIDITY
FD	FLOOR DRAIN	RM	ROOM
FDC	FIRE DEPARTMENT CONNECTION	RPM	REVOLUTIONS PER MINUTE
FIN FLR	FINISHED FLOOR	RTU	ROOF TOP UNIT
FH	FIRE HYDRANT	RV	RELIEF VALVE
FPHB	FREEZE-PROOF HOSE BIBB	SA	SUPPLY AIR
FBM	FEET PER MINUTE	SD	STORM DRAIN
FPWH	FREEZE-PROOF WALL HYDRANT	SF	SQUARE FOOT
FS	FLOOR SINK	SHR	SHOWER
GALV	GALVANIZED	SS	SANITARY SEWER
GAS	NATURAL GAS	SS	SERVICE SINK
GC	GENERAL CONTRACTOR	SUB	SUBSTITUTE
GCO	GRADE CLEANOUT	TP	TRAP PRIMER
GPD	GALLONS PER DAY	TSTAT	THERMOSTAT
GPM	GALLONS PER MINUTE	TYP	TYPICAL
GT	GREASE TRAP	UNO	UNLESS NOTED OTHERWISE
HB	HOSE BIBB	UR	URINAL
HC	HEATING COIL	V	VENT
HD	HEAVY DUTY	VIF	VERIFY IN FIELD
HT	HEIGHT	VOLT	VOLTAGE
HW	HOT WATER	W/	WITH
HWR	HOT WATER RETURN	W/O	WITHOUT
HWS	HOT WATER SUPPLY	WB	WET BULB
IBC	INTERNATIONAL BUILDING CODE	WC	WATER CLOSET
IO	INPUT/OUTPUT	WCO	WALL CLEAN-OUT
J-BOX	JUNCTION BOX	WHA	WATER HAMMER ARRESTOR

GENERAL MECHANICAL AND PLUMBING NOTES:

1. ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS TO PREVENT VOIDING OF WARRANTY. REFER TO EXISTING ROOF WARRANTY WHEN PERFORMING WORK ON ROOF AND FOLLOW WARRANTY REQUIREMENTS.

2. PLANS SHOW AIR DEVICES IN COORDINATION WITH REFLECTED CEILING PLANS. ARCHITECT MAY CHANGE CEILING TYPES WITHOUT NOTICE. VERIFY CEILING TYPES BEFORE ORDERING AIR DEVICES. IN HARD CEILINGS AND WALLS, PROVIDE ACCESS PANELS TO FULLY ACCESS AND SERVICE ALL ISOLATION VALVES, FIRE/SMOKE DAMPERS, BALANCING DAMPERS, CONTROL DEVICES, AND ALL OTHER DEVICES THAT REQUIRE MAINTENANCE.

3. PROVIDE SOUND ELBOW FOR ALL CEILING RETURN/TRANSFER AIR GRILLES AS SHOWN IN DETAIL SHEET, UNLESS SHOWN WITH A DIFFERENT DUCT CONFIGURATION. USE NO MORE THAN 5 FT OF FLEXIBLE DUCT LENGTHS. ALL OTHER DUCTWORK SHALL BE RIGID METAL, PER SPECIFICATIONS. SEE DUCT CONSTRUCTION SCHEDULE AND SPECIFICATIONS FOR SPECIFIC AND GENERAL MATERIALS AND REQUIREMENTS. ALL RECTANGULAR SQUARE ELBOWS SHALL BE PROVIDED WITH INTERNALTURNING VANES. INSTALL FLEXIBLE DUCT CONNECTIONS BETWEEN DUCTWORK AND ANY EQUIPMENT CONTAINING A MOTOR (NO EXCEPTIONS). DUCT DIMENSIONS ARE INSIDE DIMENSIONS. INCREASE SIZE OF DUCTS IF ACOUSTIC LINING IS SCHEDULED OR SPECIFIED. DO NOT INSTALL THERMOSTATS ON EXTERIOR WALLS.

4. ALL MATERIALS ON PLANS ARE NEW, UNLESS INDICATED OTHERWISE. OWNER HAS FIRST RIGHT OF REFUSAL OF ANY AND ALL EQUIPMENT AND MATERIALS. ANY EQUIPMENT OR MATERIAL REQUIRING SERVICE SHALL BE INSTALLED 10FT FROM EDGE OF ROOF OR PARAPETS.

5. SUPPORT ALL PIPING, DUCTS, EQUIPMENT ON ROOF USING FLASHED AND COUNTER FLASHED CURB. LENGTH OF CURB SHALL REACH ALL STRUCTURAL MEMBERS UNDER UNIT PLUS ONE ON EACH SIDE. REPAIR DISTURBED AREAS TO A LIKE CONDITION. INSTALL ALL EQUIPMENT BASE/CURB LEVELED. PROVIDE COMPENSATION WHERE SURFACES ARE OUT OF LEVEL, SUCH AS SLOPE ON ROOFS.

6. DRAWINGS ARE CONSIDERED SCHEMATIC IN NATURE. PROVIDE REQUIRED FITTINGS AND OFFSETS FOR A COMPLETELY OPERATIONAL INSTALLATION. EQUIVALENT DUCT MAY BE SUBSTITUTED IN ACCORDANCE TO SAMCNA, PRIOR APPROVAL IS REQUIRED FROM OWNER INSTALLATION. ALL DUCTWORK SHALL BE CONSTRUCTED TO MEET SMACNA STANDARDS.

7. ALL BACKDRAFT DAMPERS SHALL BE COUNTERBALANCED TYPE WITH ADJUSTABLE WEIGHTS AND VINYL SEALS, UNLESS NOTED, SIMILAR TO RUSKIN CBD2. MINIMUM DAMPER PERFORMANCE SHALL INCLUDE A BLADE REACTION AT 0.01" W.G. AND A MAXIMUM LEAKAGE OF 15 CFM/SF AT 1" W.G. MOTORIZED OUTDOOR AIR DAMPERS SHALL BE RATED AT 4 CFM/SF AT 1.0" W.G. WHEN TESTED IN ACCORDANCE TO AMCA. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE AVAILABLE AT THE JOB SITE FOR ALL FIRE AND SMOKE DAMPERS AT THE TIME OF ROUGH-IN INSPECTION.


8. ALL MATERIAL ABOVE THE CEILING WHERE WHERE THIS SPACE IS USED A AS A RETURN AIR PLENUM MUST BE NON-COMBUSTIBLE, ALL LOW VOLTAGE/ COMMUNICATIONS CABLE MUST BE PLENUM RATED AND ALL ELECTRICAL WIRING MUST BE IN A PLENUM RATED SHEATH OR CONDUIT. ALL PVC PIMPING MUST BE ENCASED IN AN APPROVED INSULATION WITH FLAME AND SMOKE SPREAD RATING OF 25/50.

9. WITHOUT EXCEPTION, ELIMINATION OF ANY PIPING INSULATION FOR HANGERS IS NOT ACCEPTABLE. PROVIDE INSERTS, AS SPECIFIED, FOR THE PLACEMENT OF PIPING SUPPORT. CRUSHING OF INSULATION IS NOT ACCEPTABLE. SEE SPECIFICATIONS. FOR ALL ABOVE GROUND PIPING LOCATED OUTSIDE BUILDING, PROVIDE ALUMINUM JACKET OVER WATER PROOF INSULATION.

10. ALL PIPING SHALL BE ADEQUATELY SUPPORTED FROM THE BUILDING STRUCTURE TO PREVENT SAGGING, POCKETING, SWAYING OR DISPLACEMENT BY MEANS OF HANGERS AND SUPPORTS. PIPING IS NOT TO BE SUPPORTED BY EQUIPMENT. PROVIDE DIELECTRIC UNIONS BETWEEN DISSIMILAR MATERIALS. PROVIDE MANUAL AIR VENTS AND CAPPED HOSE-END DRAINS WITH ISOLATION VALVE AT PIPING HIGH AND LOW POINTS. WELD PIPE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS. WELDERS SHALL BE CERTIFIED FOR TYPE OF WELD BEING PERFORMED. FLUSH OUT PIPING AND REMOVE CONTROL DEVICES BEFORE PERFORMING PRESSURE TEST. DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. PRESSURIZE PIPING AT 100 PSIG. IF LEAKAGE IS OBSERVED OR IF TEMPERATURE COMPENSATED PRESSURE DROP EXCEEDS 1% OF TEST PRESSURE, REPAIR LEAKS AND RETEST. DO NOT USE AIR PRESSURE TO TEST PLASTIC PIPE. PROVIDE SUPPORT UNDER ELBOWS ON PUMP SUCTION AND DISCHARGE LINES. ALL STRAINERS SHALL BE FURNISHED WITH A "ROUGHING" SCREEN AND TWO (2) SCREENS FOR NORMAL OPERATION. INSTALL STRAINER WITH ROUGHING SCREEN AND OPERATE SYSTEM FOR 24 HOURS MINIMUM (RUN DOMESTIC WATER SYSTEMS AT MAX FLOW FOR A MINIMUM OF ONE HALF (1/2) HOUR. REMOVE ROUGHING SCREEN AND INSTALL NORMAL SCREEN, AFTER TWO WEEKS OF NORMAL OPERATION INSTALL NEW NORMAL SCREEN.

11. AFTER INSTALLATION OF SYSTEM, PERFORM AN OPERATIONAL TEST IN THE PRESENCE OF THE OWNER, ARCHITECT, OR ENGINEER. THIS TEST WILL CONSIST OF SUCCESSFULLY DEMONSTRATING: APPEARANCE OF INSTALLATION, FUNCTION OF ALL CONTROLS, THE CONTROLS SHALL BE OPERATED IN THE FOLLOWING MODES IN EACH ZONE: OCCUPIED/UNOCCUPIED. IF THE TEST IS NOT SUCCESSFUL IN THE OPINION OF THE ARCHITECT OR ENGINEER, DEFICIENCIES WILL BE REMEDIED AND THE SYSTEM WILL BE E-TESTED UNTIL THE TEST IS SUCCESSFUL.

12. WHERE NEW MECHANICAL SYSTEMS ARE USED FOR TEMPORARY VENTILATION OR CLIMATE CONTROL, MECHANICAL EQUIPMENT INSTALLER SHALL BE PROVIDE CONSTRUCTION FILTERS, MAINTAIN EQUIPMENT, AND CLEAN, ADJUST AND PUT IN NEW CONDITION BEFORE BUILDING OCCUPANCY. PARTS AND LABOR WARRANTY SHALL NOT BE CONSIDERED TO START UNTIL ACCEPTANCE OF THE SYSTEM BY OWNER.



2/16/2017

EH

NY

2/13/17

AS SHOWN

DRAWN BY:

CHECKED BY:

DATE:

SCALE:

SANTA FE MOUNTAIN CENTER

1160 PARKWAY DRIVE SUITES A & B

SANTA FE, NM

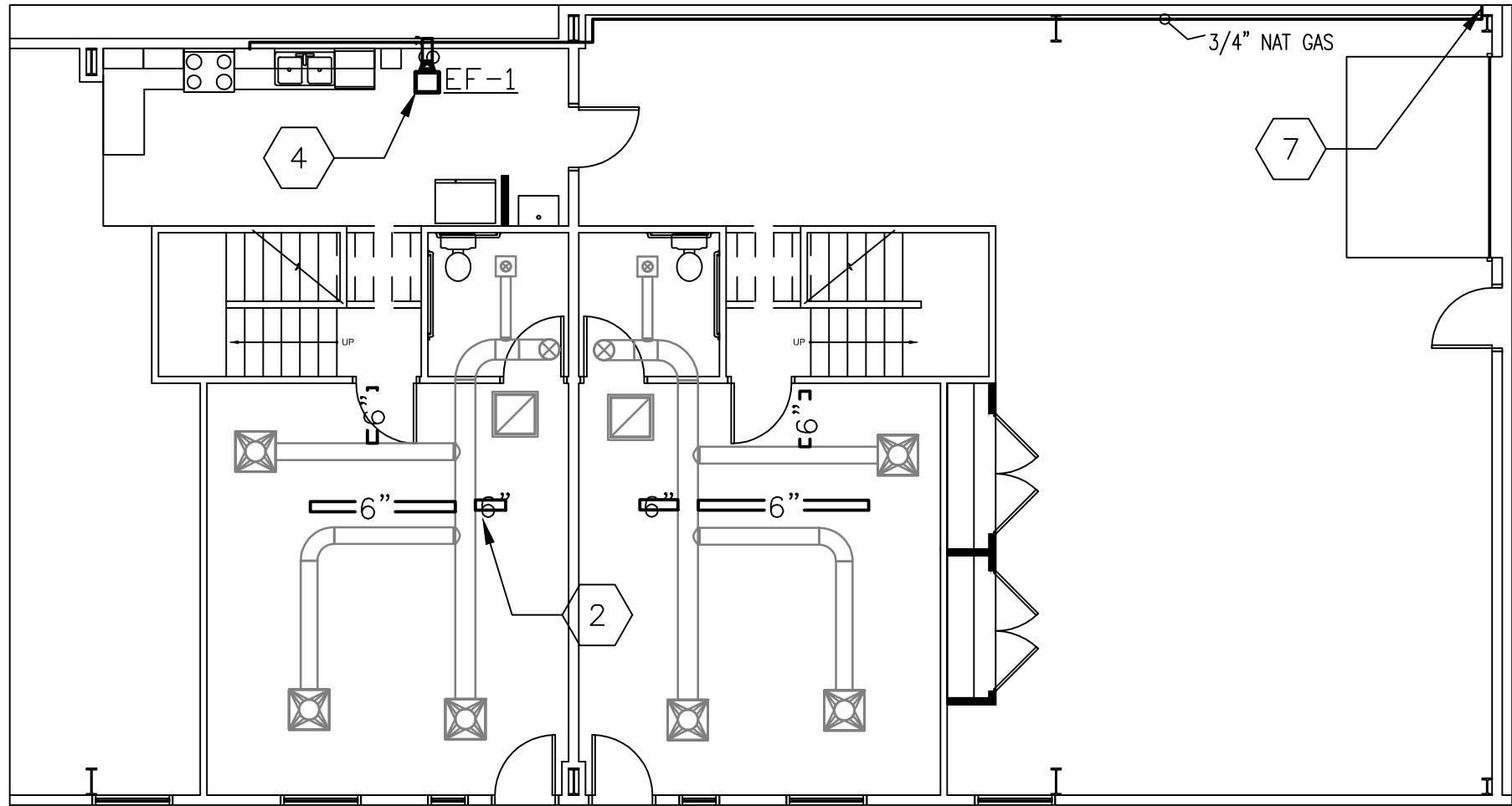
MECHANICAL GENERAL INFORMATION

-SHEET-

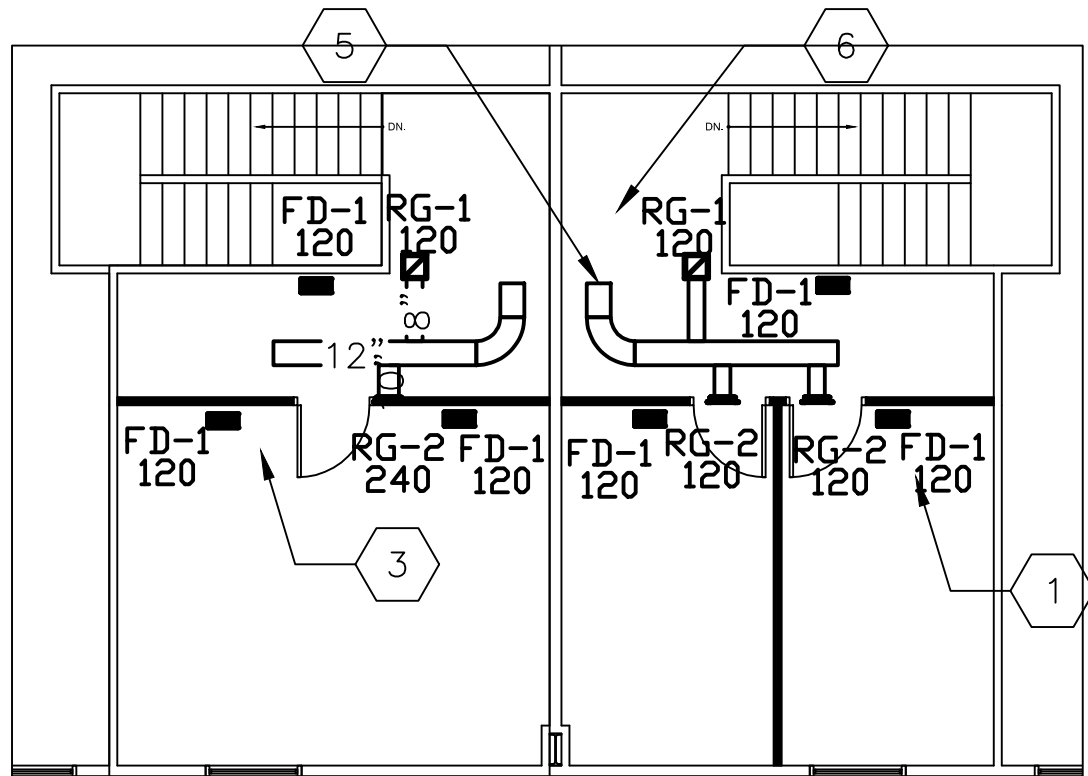
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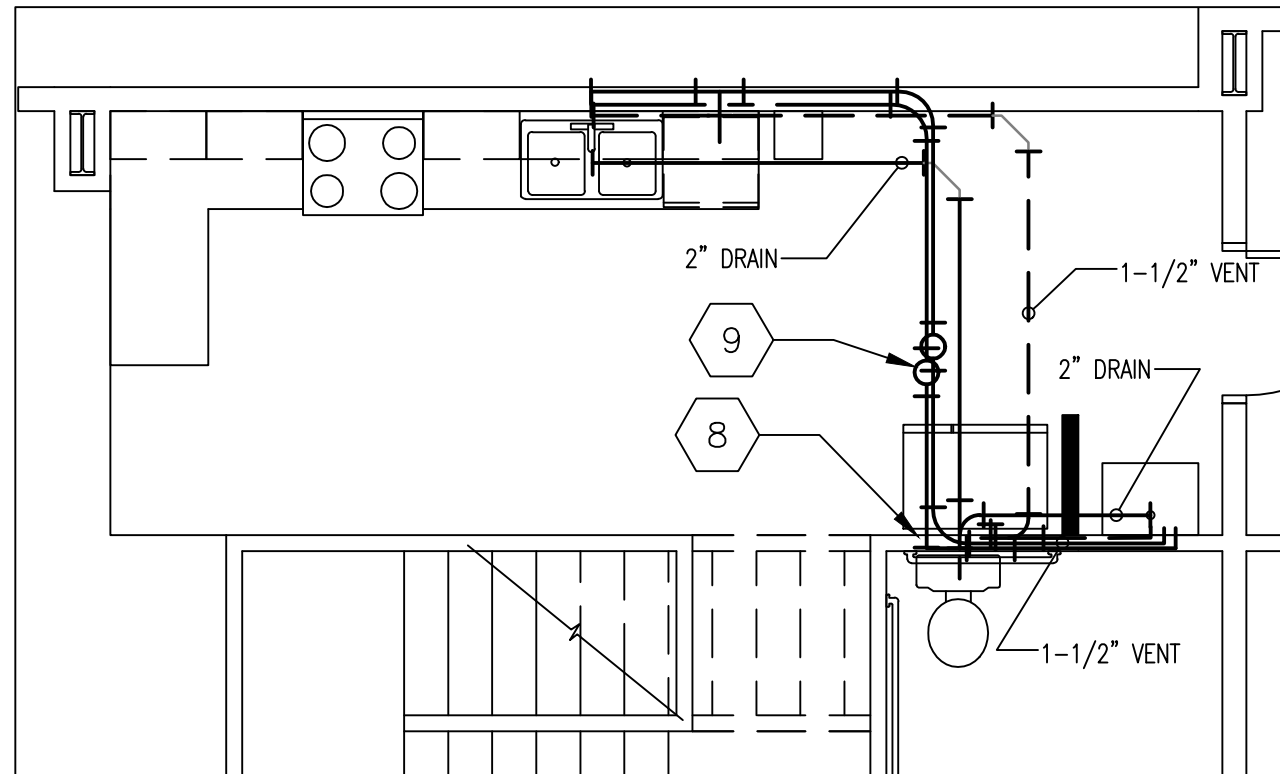
<p>2012.19 / LAGUNA DENTAL PLUMBING PIPING - 22 1006 - 1</p> <p><b>PLUMBING PIPING</b></p> <p><b>PART 1 GENERAL</b></p> <p><b>1.01 SECTION INCLUDES</b></p> <p>A. PIPE, PIPE FITTINGS, VALVES, AND CONNECTIONS FOR PIPING SYSTEMS.</p> <p><b>1.03 SUBMITTALS</b></p> <p>A. SEE SECTION 01 3000 - ADMINISTRATIVE REQUIREMENTS, FOR SUBMITTAL PROCEDURES.</p> <p>B. PRODUCT DATA: PROVIDE DATA ON PIPE MATERIALS, PIPE FITTINGS, VALVES, AND ACCESSORIES. PROVIDE MANUFACTURERS CATALOG INFORMATION. INDICATE VALVE DATA AND RATINGS.</p> <p><b>1.04 QUALITY ASSURANCE</b></p> <p>A. PERFORM WORK IN ACCORDANCE WITH STATE OF NM, STANDARDS.</p> <p>1. MAINTAIN ONE COPY ON PROJECT SITE.</p> <p>B. VALVES: MANUFACTURER'S NAME AND PRESSURE RATING MARKED ON VALVE BODY.</p> <p>C. WELDING MATERIALS AND PROCEDURES: CONFORM TO ASME (BPV IX) AND APPLICABLE STATE LABOR REGULATIONS.</p> <p>D. WELDER QUALIFICATIONS: CERTIFIED IN ACCORDANCE WITH ASME (BPV IX).</p> <p>E. IDENTIFY PIPE WITH MARKING INCLUDING SIZE, ASTM MATERIAL CLASSIFICATION, ASTM SPECIFICATION, POTABLE WATER CERTIFICATION, WATER PRESSURE RATING.</p> <p><b>1.05 REGULATORY REQUIREMENTS</b></p> <p>A. PERFORM WORK IN ACCORDANCE WITH STATE OF NM PLUMBING CODE.</p> <p>B. CONFORM TO APPLICABLE CODE FOR INSTALLATION OF BACKFLOW PREVENTION DEVICES.</p> <p>C. PROVIDE CERTIFICATE OF COMPLIANCE FROM AUTHORITY HAVING JURISDICTION INDICATING APPROVAL OF INSTALLATION OF BACKFLOW PREVENTION DEVICES.</p> <p><b>1.07 FIELD CONDITIONS</b></p> <p>A. DO NOT INSTALL UNDERGROUND PIPING WHEN BEDDING IS WET OR FROZEN.</p> <p><b>PART 2 PRODUCTS</b></p> <p><b>2.01 SANITARY SEWER PIPING, BURIED WITHIN 5 FEET OF BUILDING</b></p> <p>A. CAST IRON PIPE: ASTM A 74 EXTRA HEAVY WEIGHT.</p> <p>1. FITTINGS: CAST IRON.</p> <p>2. JOINTS: HUB-AND-SPIGOT, CISPI HSN COMPRESSION TYPE WITH ASTM C 564 NEOPRENE GASKETS OR LEAD AND OAKUM.</p> <p>B. PVC PIPE: ASTM D 2665 OR ASTM D 3034.</p> <p>1. FITTINGS: PVC.</p> <p>2. JOINTS: SOLVENT WELDED, WITH ASTM D 2564 SOLVENT CEMENT.</p> <p><b>2.02 SANITARY SEWER PIPING, ABOVE GRADE</b></p> <p>A. CAST IRON PIPE: ASTM A 74, SERVICE WEIGHT.</p> <p>1. FITTINGS: CAST IRON.</p> <p>2. JOINT SEALS: ASTM C 564 NEOPRENE GASKETS, OR LEAD AND OAKUM.</p> <p>B. CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT.</p> <p>1. FITTINGS: CAST IRON.</p> <p>2. JOINTS: CISPI 310, NEOPRENE GASKETS AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLIES.</p> <p><b>2.03 WATER PIPING, BURIED WITHIN 5 FEET OF BUILDING</b></p> <p>A. COPPER PIPE: ASTM B 42, ANNEALED.</p> <p>1. FITTINGS: ASME B16.18, CAST COPPER ALLOY OR ASME B16.22 WROUGHT COPPER AND BRONZE.</p> <p>2. JOINTS: ASTM B 32, ALLOY SN85 SOLDER.</p> <p><b>2.04 WATER PIPING, ABOVE GRADE</b></p> <p>A. COPPER TUBE: ASTM B 88 (ASTM B 88M), TYPE L (B), DRAWN (H).</p> <p>1. FITTINGS: ASME B16.18, CAST COPPER ALLOY OR ASME B16.22, WROUGHT COPPER AND BRONZE.</p> <p>2. JOINTS: ASTM B 32, ALLOY SN85 SOLDER.</p> <p><b>2.05 CONDENSATE</b></p> <p>A. COPPER TUBE: ASTM B 88 (ASTM B 88M), TYPE L (B).</p> <p>1. FITTINGS: ASME B16.29, WROUGHT COPPER, OR ASME B16.32, SOVENT.</p> <p>2. JOINTS: ASTM B 32, ALLOY SN85 SOLDER.</p> <p><b>2.06 NATURAL GAS PIPING, BURIED WITHIN 5 FEET OF BUILDING</b></p> <p>A. STEEL PIPE: ASTM A 53/A 53M SCHEDULE 40 BLACK.</p> <p>1. FITTINGS: ASTM A 234/A 234M, WROUGHT STEEL WELDING TYPE.</p> <p>2. JOINTS: ASME B31.1, WELDED.</p> <p>3. JACKET: AWWA C105/A21.5 POLYETHYLENE JACKET OR DOUBLE LAYER, HALF-LAPPED 10 MIL POLYETHYLENE TAPE.</p> <p><b>2.07 NATURAL GAS PIPING, ABOVE GRADE</b></p> <p>A. STEEL PIPE: ASTM A 53/A 53M SCHEDULE 40 BLACK.</p> <p>1. FITTINGS: ASME B16.3, MALLEABLE IRON, OR ASTM A 234/A 234M, WROUGHT STEEL WELDING TYPE.</p> <p>2. JOINTS: NFPA 54, THREADED OR WELDED TO ASME B31.1.</p> <p><b>2.08 FLANGES, UNIONS, AND COUPLINGS</b></p> <p>A. UNIONS FOR PIPE SIZES 3 INCHES AND UNDER:</p> <p>1. FERROUS PIPE: CLASS 150 MALLEABLE IRON THREADED UNIONS.</p> <p>2. COPPER TUBE AND PIPE: CLASS 150 BRONZE UNIONS WITH SOLDERED JOINTS.</p> <p>B. FLANGES FOR PIPE SIZE OVER 1 INCH:</p> <p>1. FERROUS PIPE: CLASS 150 MALLEABLE IRON THREADED OR FORGED STEEL SLIP-ON FLANGES; PREFORMED NEOPRENE GASKETS.</p> <p>2. COPPER TUBE AND PIPE: CLASS 150 SLIP-ON BRONZE FLANGES; PREFORMED NEOPRENE GASKETS.</p> <p><b>2.09 PIPE HANGERS AND SUPPORTS</b></p> <p>A. PLUMBING PIPING - DRAIN, WASTE, AND VENT:</p> <p>1. CONFORM TO MSS SP-69.</p> <p>2. HANGERS FOR PIPE SIZES 1/2 INCH TO 1-1/2 INCHES: MALLEABLE IRON, ADJUSTABLE SWIVEL, SPLIT RING.</p> <p>3. HANGERS FOR PIPE SIZES 2 INCHES AND OVER: CARBON STEEL, ADJUSTABLE, CLEVIS.</p> <p>4. MULTIPLE OR TRAPEZE HANGERS: STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.</p> <p>5. WALL SUPPORT FOR PIPE SIZES TO 3 INCHES: CAST IRON HOOK.</p> <p>6. WALL SUPPORT FOR PIPE SIZES 4 INCHES AND OVER: WELDED STEEL BRACKET AND WROUGHT STEEL CLAMP.</p> <p>7. VERTICAL SUPPORT: STEEL RISER CLAMP.</p> <p>8. FLOOR SUPPORT: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.</p> <p>9. COPPER PIPE SUPPORT: CARBON STEEL RING, ADJUSTABLE, COPPER PLATED.</p> <p>B. PLUMBING PIPING - WATER:</p> <p>1. CONFORM TO ASME B31.9.</p> <p>2. HANGERS FOR PIPE SIZES 1/2 INCH TO 1-1/2 INCHES: MALLEABLE IRON, ADJUSTABLE SWIVEL, SPLIT RING.</p> <p>3. HANGERS FOR COLD PIPE SIZES 2 INCHES AND OVER: CARBON STEEL, ADJUSTABLE, CLEVIS.</p> <p>4. MULTIPLE OR TRAPEZE HANGERS: STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.</p> <p>5. WALL SUPPORT FOR PIPE SIZES TO 3 INCHES: CAST IRON HOOK.</p> <p>6. WALL SUPPORT FOR PIPE SIZES 4 INCHES AND OVER: WELDED STEEL BRACKET AND WROUGHT STEEL CLAMP.</p> <p>7. WALL SUPPORT FOR HOT PIPE SIZES 6 INCHES AND OVER: WELDED STEEL BRACKET AND WROUGHT STEEL CLAMP WITH ADJUSTABLE STEEL YOKE AND CAST IRON PIPE ROLL.</p> <p>8. WALL SUPPORT FOR PIPE SIZES TO 3 INCHES: CAST IRON HOOK.</p> <p>9. WALL SUPPORT FOR PIPE SIZES 4 INCHES AND OVER: WELDED STEEL BRACKET AND WROUGHT STEEL CLAMP WITH ADJUSTABLE STEEL YOKE AND CAST IRON PIPE ROLL.</p> <p>10. VERTICAL SUPPORT: STEEL RISER CLAMP.</p> <p>11. FLOOR SUPPORT FOR COLD PIPE: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.</p> <p>12. FLOOR SUPPORT FOR HOT PIPE SIZES TO 4 INCHES: CAST IRON ADJUSTABLE PIPE SADDLE, LOCKNUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.</p> <p>13. FLOOR SUPPORT FOR HOT PIPE SIZES 6 INCHES AND OVER: ADJUSTABLE CAST IRON PIPE ROLL AND STAND, STEEL SCREWS, AND CONCRETE PIER OR STEEL SUPPORT.</p> <p>14. FLOOR SUPPORT FOR HOT PIPE SIZES 6 INCHES AND OVER: ADJUSTABLE CAST IRON PIPE ROLL AND STAND, STEEL SCREWS, AND CONCRETE PIER OR STEEL SUPPORT.</p> <p>15. COPPER PIPE SUPPORT: CARBON STEEL RING, ADJUSTABLE, COPPER PLATED.</p> <p><b>2.10 GATE VALVES</b></p> <p>A. UP TO AND INCLUDING 3 INCHES:</p> <p>1. MSS SP-80, CLASS 125, BRONZE BODY, BRONZE TRIM, RISING STEM, HANDWHEEL, INSIDE SCREW, SOLDIER DISC, SOLDER ENDS.</p> <p>B. 2 INCHES AND LARGER:</p> <p>1. MSS SP-70, CLASS 125, IRON BODY, BRONZE TRIM, OUTSIDE SCREW AND YOKK, HANDWHEEL, SOLID WEDGE DISC, FLANGED ENDS. PROVIDE CHAIN-WHEEL OPERATORS FOR VALVES 6 INCHES AND LARGER MOUNTED OVER 8 FEET ABOVE FLOOR.</p> <p><b>2.11 GLOBE VALVES</b></p> <p>A. UP TO AND INCLUDING 3 INCHES:</p> <p>1. MSS SP-80, CLASS 125, BRONZE BODY, BRONZE TRIM, HANDWHEEL, BRONZE DISC, SOLDER ENDS.</p> <p><b>2.12 BALL VALVES</b></p> <p>A. CONSTRUCTION, 4 INCHES AND SMALLER: MSS SP-110, CLASS 150, 400 PSI CWP, BRONZE, TWO PIECE BODY, CHROME PLATED BRASS BALL, REGULAR PORT, TEFLON SEATS AND STUFFING BOX RING, BLOW-OUT PROOF STEM, LEVER HANDLE WITH BALANCING STOPS, SOLDER ENDS WITH UNION.</p> <p><b>2.13 FLOW CONTROLS</b></p> <p>A. CONSTRUCTION: CLASS 125, BRASS OR BRONZE BODY WITH UNION ON INLET AND OUTLET, TEMPERATURE AND PRESSURE TEST PLUG ON INLET AND OUTLET, BLOWDOWN/BACKFLUSH DRAIN.</p> <p>B. CALIBRATION: CONTROL FLOW WITHIN 5 PERCENT OF SELECTED RATING, OVER OPERATING PRESSURE RANGE OF 10 TIMES MINIMUM PRESSURE REQUIRED FOR CONTROL, MAXIMUM MINIMUM PRESSURE 3.5 PSI PSI.</p> <p><b>2.14 SWING CHECK VALVES</b></p> <p>A. UP TO 2 INCHES:</p> <p>1. MSS SP-80, CLASS 125, BRONZE BODY AND CAP, BRONZE SWING DISC WITH RUBBER SEAT, SOLDER ENDS.</p> <p><b>2.15 SPRING LOADED CHECK VALVES</b></p> <p>A. CLASS 125, IRON BODY, BRONZE TRIM, STAINLESS STEEL SPRINGS, BRONZE DISC, Buna N SEALS, WATER STYLE ENDS.</p> <p><b>2.16 WATER PRESSURE REDUCING VALVES</b></p> <p>A. UP TO 2 INCHES:</p> <p>1. MSS SP-80, BRONZE BODY, STAINLESS STEEL AND THERMOPLASTIC INTERNAL PARTS, FABRIC REINFORCED DIAPHRAGM, STRAINER, THREADED SINGLE UNION ENDS.</p> <p>B. OVER 2 INCHES:</p> <p>1. MSS SP-85, CAST IRON BODY, BRONZE FITTED, ELASTOMERIC DIAPHRAGM AND SEAT DISC, FLANGED.</p> <p>C. PROVIDE A WATER PRESSURE REDUCING VALVE AND/OR STATION WHEN THE WATER PRESSURE ENTERING THE BUILDING IS 70 PSIG OR GREATER.</p> <p><b>2.17 RELIEF VALVES</b></p> <p>A. PRESSURE RELIEF:</p> <p>1. AGA Z21.22 CERTIFIED, BRONZE BODY, TEFLON SEAT, STEEL STEM AND SPRINGS, AUTOMATIC, DIRECT PRESSURE ACTUATED.</p> <p>B. TEMPERATURE AND PRESSURE RELIEF:</p> <p>1. AGA Z21.22 CERTIFIED, BRONZE BODY, TEFLON SEAT, STAINLESS STEEL STEM AND SPRINGS, AUTOMATIC, DIRECT PRESSURE ACTUATED.</p> <p>C. PROVIDE RELIEF MAXIMUM 210 DEGREES F, CAPACITY ASME (BPV IV) CERTIFIED AND LABELLED.</p> <p><b>2.18 STRAINERS</b></p> <p>A. SIZE 2 INCH AND UNDER:</p> <p>1. THREADED BRASS BODY FOR 175 PSI CWP, Y PATTERN WITH 1/32 INCH STAINLESS STEEL PERFORATED SCREEN.</p> <p>2. CLASS 150, THREADED BRONZE BODY 300 PSI CWP, Y PATTERN WITH 1/32 INCH STAINLESS STEEL PERFORATED SCREEN.</p> <p>B. SIZE 1-1/2 INCH TO 4 INCH:</p> <p>1. CLASS 125, FLANGED IRON BODY, Y PATTERN WITH 1/16 INCH STAINLESS STEEL PERFORATED SCREEN.</p> <p><b>PART 3 EXECUTION</b></p> <p><b>3.01 EXAMINATION</b></p> <p>A. VERIFY THAT EXCAVATIONS ARE TO REQUIRED GRADE, DRY, AND NOT OVER-EXCAVATED.</p> <p><b>3.02 PREPARATION</b></p> <p>A. REAM PIPE AND TUBE ENDS. REMOVE BURRS. BEVEL PLAIN END FERROUS PIPE.</p> <p>B. REMOVE SCALE AND DIRT, ON INSIDE AND OUTSIDE, BEFORE ASSEMBLY.</p> <p>C. PREPARE PIPING CONNECTIONS TO EQUIPMENT WITH FLANGES OR UNIONS.</p> <p><b>3.03 INSTALLATION</b></p> <p>A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.</p> <p>B. PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS WHEREVER JOINING DISSIMILAR METALS.</p> <p>C. ROUTE PIPING IN ORDERLY MANNER AND MAINTAIN GRADIENT. ROUTE PARALLEL AND PERPENDICULAR TO WALLS.</p> <p>D. INSTALL</p>
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**A1** MAIN LEVEL FLOOR PLAN  
1/8"=1'-0"



**A2** UPPER LEVEL FLOOR PLAN  
1/8"=1'-0"



**T2** KITCHENETTE  
SCALE: 1/4"= 1'-0"

## GENERAL SHEET NOTES

1. PROTECT ITEMS TO REMAIN. IF DAMAGED REPLACE WITH LIKE.

2. OWNER HAS FIRST RIGHT OF REFUSAL FOR ALL DEMO ITEMS. IF NOT WANTED BY OWNER, CONTRACTOR TO DISPOSE.

### KEYED NOTES:

1. FLOOR DIFFUSERS. TYPICAL.

2. NEW SUPPLY DUCTWORK SERVING FLOOR REGISTERS ABOVE. PROVIDE BALANCING DAMPERS AT TAKEOFF.

3. NEW RETURN GRILLE MOUNTED IN WALL. TYPICAL.

4. NEW CEILING MOUNTED EXHAUST FAN. PROVIDE WALL CAP.

5. CONNECT NEW RETURN DUCT TO EXISTING.

6. ADJUST SUPPLY AIRFLOW FOR EXISTING FURNACE TO 850 CFM. ADJUST VENTILATION AIR TO 110 CFM.

7. NEW 3/4" LOW PRESSURE NATURAL GAS CONNECTED TO MAIN BUILDING NATURAL GAS SUPPLY DOWNSTREAM OF GAS METER.

8. CONNECT NEW SANITARY TO EXISTING. CONNECT NEW VENT TO EXISTING.

9. 3/4" DHW AND 3/4" DCW ROUTED TO WATER HEATER CLOSET AND CONNECTED.



2/16/2017

R<sup>2</sup> ARCHITECTURAL DESIGN  
730 SAN MATEO BLVD SE, SUITE 1  
ALBUQUERQUE, NEW MEXICO 87108  
TEL: 505.792.6224 FAX: 888.892.5814

DRAWN BY:	EH
CHECKED BY:	NY
DATE:	2/13/17
SCALE:	AS SHOWN

**SANTA FE MOUNTAIN CENTER**  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM

MECHANICAL FLOOR PLAN

**-SHEET-**

**M101**

VENTILATION AIR SUPPLY PER ASHRAE 62.1  
AZ = FLOOR AREA OF ZONE (SQ FT)  
PZ = ZONE POPULATION  
RP = PEOPLE OUTDOOR RATE FROM TABLE 6.1, CFM/PERSON  
RA = AREA OUTDOOR RATE FROM TABLE 6.1, CFM/SQ FT  
EZ = ZONE AIR DISTRIBUTION EFFECTIVENESS, TABLE 6.2  
VOZ = (PZ\*RP + AZ\*RA)/EZ, OUTDOOR AIRFLOW TO THE ZONE CORRECTED FOR ZONE AIR DISTRIBUTION EFFECTIVENESS, CFM  
VPZ = PRIMARY AIRFLOW TO ZONE FROM AIR HANDLER  
VPZM = MINIMUM PRIMARY AIRFLOW TO ZONE FROM AIR HANDLER, CFM. IN CAV VPZM = VPZ  
ZP = PRIMARY OUTDOOR AIR FRACTION, VOZ/VPZM  
VOT = SUM OF VOZ, CAV ONLY, CFM

SYSTEM NAME	ZONE NAME	SPACE TYPE	ZONE DISTRIBUTION	DEFAULT ZONE POP (#/1000 SF)	AZ	PZ	RP	RA	PZ*RP	AZ*RA	EZ	VOZ	VPZ	VPZM	ZP
FUR-1	104 OFFICE	Office space	Ceiling supply of warm air at least 15°F above space temperature and ceiling return	5	504	2.52	5	0.06	12.6	30.24	0.8	53.55	400	400	0.1339
FUR-1	201 NEW OFFICE	Office space	Floor supply of warm air and ceiling return	5	135	0.675	5	0.06	3.375	8.1	0.7	16.393	120	120	0.1366
FUR-1	202 NEW OFFICE	Office space	Floor supply of warm air and ceiling return	5	135	0.675	5	0.06	3.375	8.1	0.7	16.393	120	120	0.1366
FUR-1	206 HALL	Corridors	Floor supply of warm air and ceiling return	0	234	0	0	0.06	0	14.04	0.7	20.057	210	210	0.0955

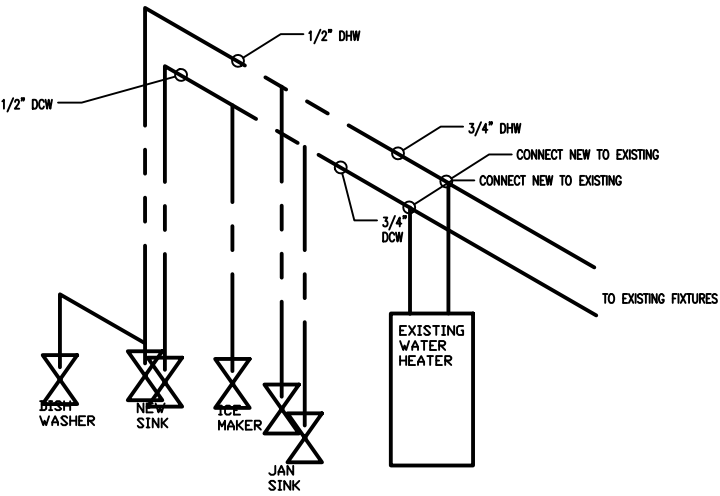
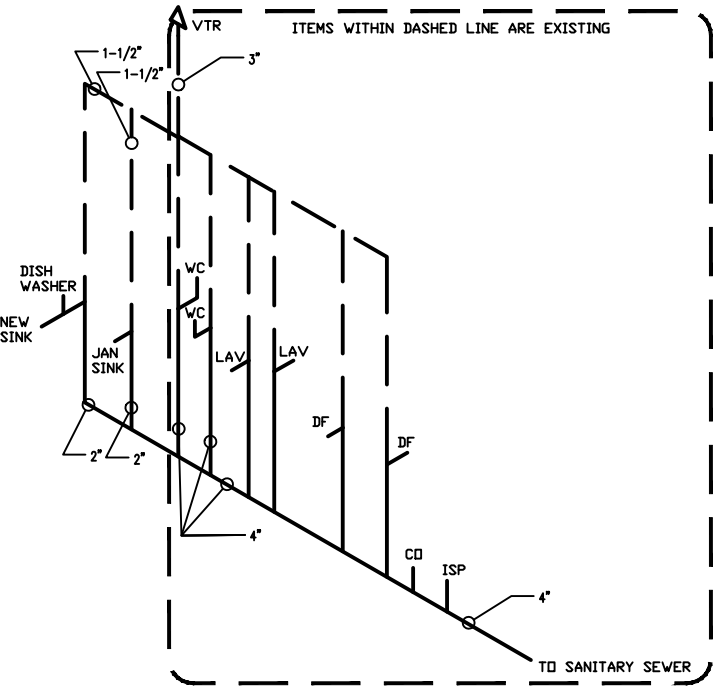
VOT  
FUR-1 106.39

106 CFM REQUIRED FOR FUR-1 PER ASHRAE 62.1

SYSTEM NAME	ZONE NAME	SPACE TYPE	ZONE DISTRIBUTION	DEFAULT ZONE POP (#/1000 SF)	AZ	PZ	RP	RA	PZ*RP	AZ*RA	EZ	VOZ	VPZ	VPZM	ZP
FUR-2	103 OFFICE	Office space	Ceiling supply of warm air at least 15°F above space temperature and ceiling return	5	504	2.52	5	0.06	12.6	30.24	0.8	53.55	400	400	0.1339
FUR-2	203 NEW OFFICE	Office space	Floor supply of warm air and ceiling return	5	135	0.675	5	0.06	3.375	8.1	0.7	16.393	120	120	0.1366
FUR-2	204 NEW OFFICE	Office space	Floor supply of warm air and ceiling return	5	135	0.675	5	0.06	3.375	8.1	0.7	16.393	120	120	0.1366
FUR-2	207 HALL	Corridors	Floor supply of warm air and ceiling return	0	234	0	0	0.06	0	14.04	0.7	20.057	210	210	0.0955

VOT  
FUR-2 106.39

106 CFM REQUIRED FOR FUR-2 PER ASHRAE 62.1



FANS									
Tag	Type	CFM	EXT. SP	Drive	Fan RPM	Voltage	MRG	Model	Max Inlet Sones
EF-1	Commercial	76	0.34	D-Direct	1200	115V	PennBarry	ZT	2.8

AIR DISTRIBUTION									
TAG	MANUFACTURER	MODEL	MOUNTING	FACE SIZE	NECK SIZE	CFM	PD MAX (IN. W.G.)	NC (MAX)	NOTES
FD-1	KRUEGER	1880	FLOOR	5X12	5X12	120	0.05	25	
RG-1	KRUEGER	EGC	CEILING	12X12	10X10	<250	0.05	25	DAMPER
RG-2	KRUEGER	S80	WALL	12X6	12X6	120	0.05	25	DAMPER



2/16/2017

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SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM

MECHANICAL DIAGRAMS

-SHEET-

M601

GENERAL ABBREVIATIONS			
A	AMPERES	KVA	KILOVOLT AMPERES
ADA	AMERICANS WITH DISABILITIES ACT	KW	KILOWATTS
AF	AMPERE FRAME	LTG	LIGHTING
AFF	ABOVE FINISHED FLOOR	LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
AFG	ABOVE FINISHED GRADE	MC	METAL CLAD CABLE
AHJ	AUTHORITY HAVING JURISDICTION	MCB	MAIN CIRCUIT BREAKER
AHU	AIR HANDLING UNIT	MCC	MOTOR CONTROL CENTER
AIC	AMPERE INTERRUPTING CAPACITY	MCP	MOTOR CIRCUIT PROTECTOR
AL	ALUMINUM	MH	MOUNTING HEIGHT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MSC	MISCELLANEOUS
ARCH	ARCHITECT	MLO	MAIN LUGS ONLY
AT	AMPERE TRIP	MOC	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	MTG	MOUNTING
ATC	AUTOMATIC TEMPERATURE CONTROL	N	NEUTRAL
AWG	AMERICAN WIRE GAUGE	NC	NORMALLY CLOSED
BFG	BELOW FINISH GRADE	NEC	NATIONAL ELECTRIC CODE
BLDG	BUILDING	NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
C	CONDUIT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CAT	CATALOG	NFSS	NON-FUSED SAFETY SWITCH
CB	CIRCUIT BREAKER	NO	NORMALLY OPEN OR NUMBER
CBM	CERTIFIED BALLASTS MANUFACTURERS	NTS	NOT TO SCALE
CKT	CIRCUIT	P	POLE
CL	CENTERLINE	PB	PUSHBUTTON
CLF	CURRENT LIMITING FUSE	PH	PHASE
COL	COLUMN	PNL	PANELBOARD
CPT	CONTROL POWER TRANSFORMER	POS	PROVIDED UNDER OTHER SECTIONS
CT	CURRENT TRANSFORMER	PVC	POLYVINYL CHLORIDE
CU	COPPER	PWR	POWER
(D)	DEMOLITION	QTY	QUANTITY
DWG	DRAWING	REQ'D	REQUIRED
(E)	EXISTING	RMC	RIGID METAL CONDUIT
(ER)	EXISTING TO REMAIN	RMS	ROOT MEAN SQUARED
EC	EMPTY CONDUIT	RNMC	RIGID NON-METALLIC CONDUIT
EF	EXHAUST FAN	RTU	ROOF TOP UNIT
EM	EMERGENCY	SP	SPARE
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EPO	EMERGENCY POWER OFF	SYM	SYMMETRICAL
ESB	ENERGY SAVING BALLAST	TEL	TELEPHONE
EW	ELECTRIC WATER COOLER	TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
F	FUSE	UG	UNDERGROUND OR UNDERGRADE
FA	FIRE ALARM	UL	UNDERWRITERS LABORATORIES
FB	FAN BOX	UON	UNLESS OTHERWISE NOTED
FLA	FULL LOAD AMPERES	V	VOLT
FMC	FLEXIBLE METAL CONDUIT	VAV	VOLUME AIR TERMINAL BOX
FSS	FUSED SAFETY SWITCH	VT	VOLTAGE TRANSFORMER
FT	FEET	W	WIRE
GFI	GROUND FAULT INTERRUPTER	WH	WATER HEATER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WP	WEATHERPROOF
GND,G	GROUND OR GROUNDING	XFMR	TRANSFORMER
GRMC	GALVANIZED RIGID METALLIC CONDUIT	Δ	DELTA
HOA	HAND, OFF, AUTOMATIC SWITCH	Y	WYE
HP	HORSEPOWER	Ø	PHASE
HPF	HIGH POWER FACTOR	#	NUMBER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS		
IG	ISOLATED GROUND		
IMC	INTERMEDIATE METAL CONDUIT		
INT	INTERLOCK		
K	KELVIN		
KMIL	THOUSAND CIRCULAR MILS		

GENERAL NOTES	
1.	ALL WIRING SHALL BE RUN CONCEALED UNLESS SPECIFIED OTHERWISE.
2.	ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE.
3.	ALL COMPONENTS SHOWN ON THE RISER DIAGRAMS, BUT NOT ON THE PLANS OR VICE VERSA, SHALL BE INCLUDED AS IF SHOWN ON BOTH.
4.	EXACT LOCATION OF MECHANICAL EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL DRAWINGS.
5.	CONTRACTOR SHALL REVIEW ALL TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE ARCHITECT.
6.	REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
7.	REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES. IF DISCREPANCIES OCCUR, CONTRACTOR MUST NOTIFY ARCHITECT.
8.	BRANCH CIRCUIT WIRING MAY NOT BE SHOWN GRAPHICALLY ON DRAWINGS AND MAY BE INDICATED BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT INDICATED GRAPHICALLY. PHASE BALANCE ALL PANELBOARDS IN THE FIELD.
9.	THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. THE DRAWINGS ARE NOT INTENDED TO BE ABSOLUTELY PRECISE. THE DRAWINGS ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, JUNCTION BOX, FITTING AND COMPONENT. THE PURPOSE OF THE DRAWINGS IS TO INDICATE A SYSTEMS CONCEPT, THE MAIN COMPONENTS OF THE SYSTEM AND THE APPROXIMATE GEOMETRICAL RELATIONSHIP. BASED ON THE SYSTEMS CONCEPT, THE MAIN COMPONENTS AND THE APPROXIMATE GEOMETRICAL RELATIONSHIPS, THE CONTRACTOR SHALL PROVIDE ALL OTHER COMPONENTS AND MATERIALS NECESSARY TO MAKE THE SYSTEMS FULLY COMPLETE AND OPERATIONAL.

LIGHTING EQUIPMENT LEGEND (REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION)	
	LIGHT FIXTURE
	"14" INDICATES FIXTURE TYPE
	"13" INDICATES CIRCUIT NUMBER
	"0" INDICATES SWITCH CONTROL

WIRING DEVICES LEGEND	
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DOUBLE DUPLEX RECEPTACLE.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE. "0" DENOTES SWITCH CONTROL
	SPECIAL PURPOSE RECEPTACLE, REFER TO "SPECIAL PURPOSE RECEPTACLES SCHEDULE".
	SPECIAL PURPOSE RECEPTACLE, . FLOOR MOUNTED. REFER TO "SPECIAL PURPOSE RECEPTACLES SCHEDULE".
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE, CEILING MOUNTED
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DOUBLE DUPLEX RECEPTACLE, CEILING MOUNTED
<u>Receptacle Subscripts:</u>	
"2"	INDICATES CIRCUIT NUMBER
"GFI"	INDICATES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT INTERRUPTER
"WP"	INDICATES WEATHERPROOF
"IG"	ISOLATED GROUND
"C"	COMPUTER
S <sub>b</sub>	SINGLE POLE TOGGLE SWITCH
	"S" DENOTES SWITCH CONTROL
	"D" DENOTES DIMMER TYPE SWITCH
	"M" DENOTES MOTOR TYPE SWITCH
S <sub>3</sub>	THREE WAY TOGGLE SWITCH
S <sub>4</sub>	FOUR WAY TOGGLE SWITCH
S <sub>M</sub>	MOTOR RATED SWITCH

CIRCUITRY, RACEWAYS AND FEEDERS LEGEND	
LP2B-12,14,16	CIRCUIT HOMERUN TO PANELBOARD. PANEL DESIGNATION IS "LP2B". CIRCUIT BREAKER DESIGNATION IS CIRCUIT #1,3,5.
	GENERAL POWER BRANCH CIRCUIT HOMERUN TO PANELBOARD. WITHOUT EXCEPTION, ALL BRANCH CIRCUIT WIRING AND HOMERUNS RELATED TO GENERAL POWER AND LIGHTING CIRCUITS SHALL INCLUDE A SEPARATE GREEN EQUIPMENT GROUND CONDUCTOR.
	ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH SCHEDULES, NEC AND SPECIFICATIONS.
	CIRCUITRY TURNING UP
	CIRCUITRY TURNING DOWN
	FEEDER SIZE TAG SYMBOL. REFER TO "LEGEND OF FEEDER SIZES".

FIRE ALARM SYSTEM LEGEND	
	CARBON MONOXIDE DETECTOR
	SMOKE DETECTOR

EQUIPMENT LEGEND	
	120/240 VOLT, 1ø, 3 WIRE PANEL
	JUNCTION AND/OR PULL BOX
	MOTOR
	EXHAUST FAN
	DISCONNECT SWITCH (FUSED); COORDINATE FUSE SIZE WITH MECHANICAL
	POLES
	FUSE SIZE (NF = NON FUSED)
	FRAME SIZE

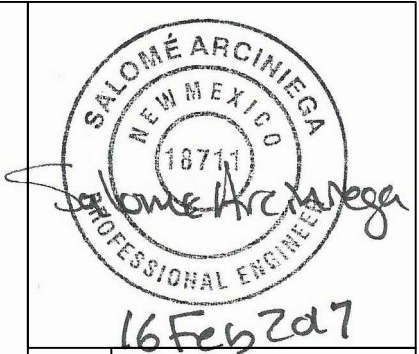
COMMUNICATION DEVICES LEGEND	
	TELEPHONE OUTLET
	COMBINATION TELEPHONE/DATA OUTLET
	DATA ONLY OUTLET

BRANCH CIRCUIT SCHEDULE			
CIRCUIT TYPE	CIRCUIT BREAKER	CONDUCTORS	CONDUIT
1 POLE - 1 PHASE 2 WIRE + GROUND	20A-1P	2 #12 + 1 #12 G.	3/4"
	30A-1P	2 #10 + 1 #10 G.	3/4"
	40A-1P	2 #8 + 1 #10 G.	3/4"
	50A-1P	2 #6 + 1 #10 G.	3/4"
	60A-1P	2 #4 + 1 #10 G.	1 1/4"
2 POLE - 1 PHASE 2 WIRE + GROUND	20A-2P	2 #12 + 1 #12 G.	3/4"
	30A-2P	2 #10 + 1 #10 G.	3/4"
	40A-2P	2 #8 + 1 #10 G.	3/4"
	50A-2P	2 #6 + 1 #10 G.	3/4"
	60A-2P	2 #4 + 1 #10 G.	1 1/4"
2 POLE - 1 PHASE 3 WIRE + GROUND	20A-2P	3 #12 + 1 #12 G.	3/4"
	30A-2P	3 #10 + 1 #10 G.	3/4"
	40A-2P	3 #8 + 1 #10 G.	3/4"
	50A-2P	3 #6 + 1 #10 G.	3/4"
	60A-2P	3 #4 + 1 #10 G.	1 1/4"
<u>Schedule Notes:</u>			
1. TYPE MC CABLE SHALL INCLUDE FULL SIZE INSULATED GROUND CONDUCTOR. SIZES AS INDICATED IN SCHEDULE. REFER TO SPECIFICATIONS FOR PERMITTED APPLICATION.			
2. REFER TO FEEDER SCHEDULE ON ELECTRICAL POWER RISER DIAGRAM FOR ADDITIONAL INFORMATION.			
3. ALL CONDUCTOR SIZES ARE BASED ON CONDUIT LENGTHS OF 60 FEET FOR 120 VOLT BRANCH CIRCUITS AND 150 FEET FOR 277 VOLT BRANCH CIRCUITS. IF LENGTH EXCEEDS 60 FEET (120V, 20A CIRCUITS) OR 150 FEET (277V, 20A CIRCUITS), THEN USE WIRE SIZE DENOTED BELOW AND INCREASE CONDUIT SIZE AS REQUIRED BY NEC.			
4. TREAT 15A CIRCUIT SIMILAR TO 20A CIRCUIT AND 25A CIRCUIT SIMILAR TO 30A CIRCUIT.			
WIRE SIZE	CIRCUIT LENGTH		
	120V CIRCUIT	277V CIRCUIT	
	#10	60' TO 120'	150' TO 240'
	#8	120' TO 180'	ABOVE 240'
#6	180' AND ABOVE		-

TYPICAL DEVICE MOUNTING HEIGHTS DETAIL	
<u>NOTES:</u>	
1. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT EXIT SIGNS.	
2. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.	
3. ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL UNLESS OTHERWISE NOTED.	
4. COORDINATED EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.	

EXISTING EQUIPMENT LEGEND	
XM	EXISTING EQUIPMENT TO REMAIN.
XN	EXISTING EQUIPMENT TO BE REMOVED AND REPLACED WITH NEW.
XR	EXISTING EQUIPMENT TO BE REMOVED WITH ALL ASSOCIATED WIRING AND APPURTENANCES.
XRE	EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED, AS SHOWN.

ELECTRICAL LEGEND	
	E1 EXTERIOR SECURITY LIGHT/SMALL
	E2 EXTERIOR SECURITY LIGHT/MEDIUM
	E3 EXTERIOR SECURITY LIGHT/LARGE
	E4 EXTERIOR SECURITY LIGHT/UP/DN
	E5 EXTERIOR SECURITY LIGHT/DN
	S1 INTERIOR SCONCE
	L1 LED TAPE LIGHT/UNDERCOUNTER
	L2 LED TAPE LIGHT/OVER CABINET
	L3 LED TAPE LIGHT/CABINET LIGHTING
	V1 1 BULB VANITY LIGHT
	V3 3 BULB VANITY LIGHT
	V5 5 BULB VANITY LIGHT
	○ RECESSED DOWNLIGHT
	○ SH RECESSED DOWNLIGHT WITH SHOWERTRIM
	○ B1 SURFACE MOUNTED LARGE SIZE.
	○ B2 SURFACE MOUNTED MEDIUM SIZE.
	○ B3 SURFACE MOUNTED SMALL SIZE.
	P1 KITCHEN PENDANT
	P2 FOYER PENDANT
	P3 FRONT PENDANT
	P4 MEDIUM PENDANT
	P5 BATHROOM PENDANT
	→ DIRECTIONAL SPOTLIGHTS
	⊙ CEILING MOUNT DOWNLIGHT
	— ELECTRICAL CABLE



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SANTA FE MOUNTAIN CENTER 1160 PARKWAY DRIVE SUITES A & B SANTA FE, NM		ELECTRICAL GENERAL INFORMATION	

-SHEET-

E001



<div>SECTION 26 1100 - RACEWAYS PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B. GENERAL PROVISIONS: SECTION 2601.00.</div> <div>C. GROUNDING: SECTION 26 4500. PART 2 PRODUCTS</div> <div>2.1 CONDUITS</div> <div>A. RIGID STEEL CONDUIT: RIGID, THREADED, THICK -WALL WITH ZINC -COATED ON THE INSIDE AND EITHER ZINC -COATED OR COATED WITH AN APPROVED CORROSION-RESISTANT COATING ON THE OUTSIDE .</div> <div>B. RIGID ALUMINUM CONDUIT: RIGID, THREADED, THICK -WALL TYPE, APPROVED FOR THE APPLICATION.</div> <div>C. INTERMEDIATE METAL CONDUIT (IMC): RIGID, THREADED, LIGHTWEIGHT STEEL, ZINC-COATED OR COATED ON THE OUTSIDE AND EITHER ZINC -COATED OR COATED WITH AN APPROVED CORROSION-RESISTANT COATING ON THE INSIDE.</div> <div>D. RIGID NON-METALLIC CONDUIT: SCHEDULE 40, HIGH IMPACT PVC WITH 7,000 PSI TENSILE STRENGTH AT 73.4 DEGREES FAHRENHEIT, 11,000 PSI FLEXURAL STRENGTH, 8,800 PSI COMPRESSION STRENGTH, APPROVED 90 DEGREE CONDUITORS: CARLON, TRIANGLE OR APPROVED EQUAL.</div> <div>E. ELECTRICAL METALLIC TUBING (EMT): MILD STEEL, ZINC -COATED ON THE OUTSIDE AND EITHER ZINC -COATED OR COATED WITH AN APPROVED CORROSION-RESISTANT COATING ON THE INSIDE.</div> <div>F. FLEXIBLE CONDUIT: COMMERCIAL GREENFIELD, GALVANIZED STEEL, WITH A SEPARATE GROUNDING BOND WIRE INSTALLED IN THE CONDUIT IN ADDITION TO OTHER WIRES.</div> <div>G. LIQUID-TIGHT FLEXIBLE CONDUIT: FLEXIBLE GALVANIZED STEEL TUBING WITH EXTRUDED LIQUID-TIGHT PVC OUTER JACKET AND A SEPARATE GROUNDING CONDUCTOR INSTALLED IN THE CONDUIT.</div> <div>H. CONDUIT SIZE: MINIMUM CONDUIT SIZE 1/2" EXCEPT WHERE SPECIFICALLY APPROVED FOR EQUIPMENT</div> <div>CONNECTIONS.</div> <div>SIZES NOT NOTED ON THE DRAWINGS SHALL BE AS REQUIRED BY THE NEC.</div> <div>2.2 CONDUIT FITTINGS</div> <div>A. RIGID STEEL CONDUIT, IMC AND EMT FITTINGS: IRON, STEEL, OR DIE-CAST ONLY.</div> <div>B. RIGID ALUMINUM CONDUIT FITTINGS: MALLEABLE IRON, STEEL OR ALUMINUM ALLOY. FERROUS FITTINGS ZINC -COATED OR CADMIUM PLATED. ALUMINUM ALLOY FITTINGS SHALL CONFORM TO THE CHARACTERISTICS DEFINED BY UL FOR RIGID ALUMINUM METALLIC CONDUIT AND SHALL NOT CONTAIN MORE THAN 0.04 PERCENT COPPER .</div> <div>C. RIGID NON-METALLIC CONDUIT FITTINGS: APPROVED FOR THE PURPOSE AND AS RECOMMENDED BY THE MANUFACTURER .</div> <div>D. FLEXIBLE CONDUIT FITTINGS (COMMERCIAL GREENFIELD): EITHER DIE-CAST, STEEL OR MALLEABLE IRON ONLY WITH INSULATED THROATS AND SHALL BE OF ONE OF THE FOLLOWING TYPES:</div> <div>1. SQUEEZE OR CLAMP TYPE WITH BEARING SURFACE CONTOURED TO WRAP AROUND THE CONDUIT AND CLAMPED BY ONE OR MORE SCREWS.</div> <div>2. STEEL, MULTIPLE POINT TYPE, FOR THREADING INTO INTERNAL WALL OF THE CONDUIT CONVOLUTIONS.</div> <div>3. WEDGE AND SCREW TYPE WITH ANGULAR IN-EDGE FITTING BETWEEN THE CONVOLUTIONS OF THE CONDUIT.</div> <div>E. LIQUID-TIGHT FLEXIBLE CONDUIT FITTINGS: WITH THREADED GROUNDING CONE: A STEEL, NYLON, OR EQUAL PLASTIC COMPRESSION RING AND A GLAND FOR TIGHTENING. EITHER STEEL OR MALLEABLE IRON ONLY WITH INSULATED THROATS AND MALE THREAD AND LOCKOUT OR MALE BUSHING WITH OR WITHOUT "O" RING SEAL.</div> <div>F. CONNECTORS AND COUPLINGS: COMPRESSION TYPE THREADLESS FITTINGS FOR RIGID STEEL CONDUIT OR IMC NOT PERMITTED. SET -SCREW TYPE FITTINGS FOR RIGID ALUMINUM CONDUIT NOT PERMITTED. EMT COUPLINGS AND CONNECTORS EITHER DIE -CAST STEEL, OR MALLEABLE IRON ONLY, "CONCRETE -TIGHT" OR "RAINTIGHT," AND EITHER THE GLAND AND RING COMPRESSION TYPE OR THE STAINLESS STEEL MULTIPLE POINT LOOKING TYPE. CONNECTORS TO HAVE INSULATED THROATS. EMT FITTINGS USING SET -SCREWS OR INDENTATIONS AS A MEANS OF ATTACHMENT ARE NOT PERMITTED.</div> <div>G. BUSHINGS: INSULATED TYPE, DESIGNED TO PREVENT ABRASION OF THE WIRES WITHOUT IMPAIRING</div> <div>THE CONTINUITY OF THE CONDUIT GROUNDING SYSTEM , FOR RIGID STEEL CONDUIT, IMC, AND RIGID ALUMINUM CONDUIT.</div> <div>H. EXPANSION FITTINGS: EACH CONDUIT THAT IS BURIED IN OR RIGIDLY SECURED TO THE BUILDING CONSTRUCTION ON OPPOSITE SIDES OF A BUILDING EXPANSION JOINT AND EACH RUN OF 100 FEET OF EXPOSED CONDUIT SHALL BE PROVIDED WITH AN EXPANSION FITTING. EXPANSION FITTINGS SHALL BE HOT DIPPED GALVANIZED MALLEABLE IRON WITH FACTORY -INSTALLED PACKING AND A GROUNDING RING.</div> <div>I. SEALING FITTINGS: THREADED, ZINC OR CADMIUM COATED, CAST OR MALLEABLE IRON TYPE FOR</div> <div>STEEL CONDUITS AND THREADED CAST ALUMINUM TYPE FOR ALUMINUM CONDUITS. FITTINGS USED TO PREVENT PASSAGE OF WATER VAPOR SHALL BE OF THE CONTINUOUS DRAIN TYPE.</div> <div>2.3 WIREWAYS: SQUARE D COMPANY SQUARE DUCT LAY IN TYPE WITHOUT KNOCKOUTS WITH LENGTHS AND FITTINGS HINGED TO PROVIDE AN UNSTRUCTURED WIREWAY TO "LAY-IN" CONDUITORS, USE STANDARD LENGTHS. FIELD CUTS PERMITTED WHERE ABSOLUTELY NECESSARY. RUST-INHIBITING PHOSPHATIZING COATING ON SHEET METAL PARTS. BLUE-GRAY BAKED ENAMEL FINISH. HARDWARE PLATED TO PREVENT CORROSION. TRANSPORTATION SECTION, GUSSETT BRACKETS, NIPPLES, PULL BOXES, REDUCER, FITTINGS, WALL FLANGES, PANELS OR CABINET FLANGES, ELBOWS, CEILING AND WALL SUPPORT BRACKETS AND SUPPORTING HARDWARE, ETC.</div> <div>PART 3 EXECUTION</div> <div>3.1 CONDUIT INSTALLATION</div> <div>A. CONDUIT SYSTEMS: RIGID STEEL CONDUIT, IMC, RIGID NON-METALLIC CONDUIT OR EMT UNLESS OTHERWISE SPECIFIED.</div> <div>B. ALUMINUM CONDUIT: ALUMINUM CONDUIT MAY BE USED ONLY IN DRY LOCATIONS ABOVE GROUND IN SIZES TWO INCH OR LARGER FOR POWER AND COMMUNICATIONS SYSTEMS.</div> <div>C. RIGID NON-METALLIC CONDUIT: INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. JOINTS SHALL BE SOLVENT WELDED. FIELD BENDS SHALL UTILIZE APPROVED BENDING EQUIPMENT. PROVIDE RIGID STEEL ELBOWS AND RIGID STEEL CONDUIT RISERS ON UNDERGROUND RUNS OR RUNS IN CONCRETE. PROVIDE A SUITABLE BOND WIRE IN EACH RUN EXCEPT LOW VOLTAGE COMMUNICATIONS RUNS. UNDERGROUND RUNS UNDER CONCRETE SLABS MAY BE DIRECT BURIED WITHOUT CONCRETE ENCASEMENT IF OF APPROVED TYPE. RIGID NON-METALLIC CONDUIT MAY BE INSTALLED OUTSIDE. THE PERIMETER OF THE BUILDING ONLY WHEN ENCASED IN CONCRETE. CONCRETE TOTAL ENCASEMENT SHALL BE A MINIMUM OF FOUR INCHES AROUND OUTSIDE OF CONDUIT. RIGID NON-METALLIC CONDUIT IS NOT PERMITTED TO BE SURFACE MOUNTED IN DUCTS, PLenums OR OTHER AIR HANDLING SPACES. ALL 90 DEGREE BENDS SHALL BE RIGID STEEL CONDUIT. FOR ENCASED CONDUITS CARRYING 600 VOLTS OR MORE, THE CONCRETE SHALL BE COLORED RED USING A PERMANENT DYE.</div> <div>D. EMT: NOT PERMITTED UNDERGROUND OR EMBEDDED IN CONCRETE.</div> <div>E. FLEXIBLE CONDUITS: USE FLEXIBLE CONDUIT ONLY FOR MOTOR OR EQUIPMENT CONNECTIONS AND THEN ONLY TO THE EXTENT OF MINIMUM LENGTHS REQUIRED FOR CONNECTIONS. LENGTH SHALL NOT EXCEED 5 FEET WITHOUT APPROVAL FROM THE ARCHITECT AND OWNER . INSTALL FLEXIBLE CONDUIT CONNECTIONS AT ALL RESILIENT-MOUNTED EQUIPMENT. PROVIDE LIQUID -TIGHT FLEXIBLE CONDUIT IN EXTERIOR , WET OR DAMP LOCATIONS AND FOR CONNECTIONS TO WET PIPE MECHANICAL SYSTEMS.</div> <div>F. CONDUIT IN CONCRETE: RIGID STEEL CONDUIT OR RIGID NON-METALLIC CONDUIT MAY NOT BE EMBEDDED IN CONCRETE THAT IS IN DIRECT CONTACT WITH THE EARTH. WHEN EMBEDDED, THE OUTSIDE DIAMETER SHALL NOT EXCEED ONE-THIRD THE THICKNESS OF THE CONCRETE SLAB, WALL OR BEAM, SHALL BE LOCATED ENTIRELY WITHIN THE CENTER THIRD OF THE MEMBER , AND THE LATERAL SPACING OF CONDUITS SHALL BE LESS THAN THREE DIAMETER UNLESS OTHERWISE PROHIBITED BY ARCHITECT.</div> <div>G. STEEL CONDUIT IN GROUND: RIGID STEEL CONDUIT THAT IS NOT COMPLETELY ENCASED IN CONCRETE BUT IS IN CONTACT WITH GROUND OR ON A VAPOR BARRIER SHALL BE WRAPPED WITH SCOTCHWRAP 51</div> <div>HALF-LAPPED, OR SHALL HAVE AN ADDITIONAL OUTSIDE FACTORY COATING OF POLYVINYL CHLORIDE WITH A</div> <div>MINIMUM COAT THICKNESS OF 20 MILS. OTHER PVC OR PHENOLIC-RESIN EPOXY COATING MATERIAL WHICH IS</div> <div>EQUALLY FLEXIBLE AND CHEMICALLY RESISTANT MAY BE USED PROVIDING APPROVAL BY THE ARCHITECT IS</div> <div>OBTAINED PRIOR TO THE INSTALLATION.</div> <div>H. EXPOSED CONDUITS: INSTALL EXPOSED CONDUIT SYSTEMS PARALLEL TO OR AT RIGHT ANGLES TO THE LINES OF THE BUILDING. RIGHT ANGLE BENDS IN EXPOSED RUNS SHALL BE MADE WITH STANDARD ELBOWS, SCREW JOINTED CONDUIT FITTINGS OR CONDUIT BENT TO RADI NOT LESS THAN THOSE OF STANDARD ELBOWS.</div>	<div>I. CONCEALED CONDUITS: INSTALL CONDUIT SYSTEMS CONCEALED UNLESS OTHERWISE NOTED.</div> <div>CONDUIT SYSTEMS MAY BE EXPOSED IN UNFINISHED UTILITY AREAS, CEILING CAVITIES, AND WHERE SPECIFICALLY APPROVED BY THE ARCHITECT. INSTALL CONCEALED CONDUIT SYSTEMS IN AS DIRECT LINES AS POSSIBLE.</div> <div>J. CONDUIT OPENINGS: PROTECT ALL VERTICAL RUNS OF CONDUITS OR EMT TERMINATING IN THE</div> <div>BOTTOMS OF BOXES OR CABINETS, ETC., FROM THE ENTRANCE OF FOREIGN MATERIAL PRIOR TO</div> <div>INSTALLATION OF CONDUCTORS.</div> <div>K. SEALING FITTINGS: INSTALL WHERE REQUIRED BY THE NEC, WHERE CONDUITS PASS FROM WARM TO COLD LOCATIONS AND WHERE OTHERWISE INDICATED.</div> <div>L. SLEEVES FOR CONDUIT: INSTALL SLEEVES FOR CONDUIT WHERE SHOWN OR AS REQUIRED. CONDUIT</div> <div>SLEEVES NOT USED SHALL BE PLUGGED WITH RECESSED TYPE PLUGS. SLEEVE ALL CONDUIT PASSING</div> <div>THROUGH WALLS. SLEEVES THAT ARE USED SHALL BE SEALED TIGHT WITH RATED FIRE AND SMOKEPROOFING</div> <div>COMPOUNDS AS SPECIFIED IN SECTION 139.00.</div> <div>3.2 CONDUIT SUPPORTS</div> <div>A. SUPPORTS: PROVIDE SUPPORTS FOR HORIZONTAL STEEL CONDUITS AND EMT NOT MORE THAN EIGHT FEET APART WITH ONE SUPPORT NEAR EACH ELBOW OR BEND AND ONE SUPPORT WITHIN ONE FOOT OF EACH COUPLING, INCLUDING RUNS ABOVE SUSPENDED CEILINGS.</div> <div>B. STRAPS: INSTALL ONE-HOLE PIPE STRAPS ON CONDUITS 1-1/2" OR SMALLER . INSTALL INDIVIDUAL PIPE HANGERS FOR CONDUITS LARGER THAN 1-1/2". SPRING STEEL FASTENERS WITH HANGER RODS MAY BE USED IN DRY LOCATIONS IN LIEU OF PIPE STRAPS.</div> <div>C. TRAPEZES: INSTALL MULTIPLE (TRAPEZE) PIPE HANGERS, UNI-STRUT OR APPROVED EQUAL, WHERE TWO OR MORE HORIZONTAL CONDUITS OR EMT RUN PARALLEL, AND AT THE SAME ELEVATION. SECURE EACH CONDUIT OR EMT TO THE HORIZONTAL HANGER MEMBER BY SPECIFICALLY DESIGNED AND APPROVED FASTENERS FOR THE SYSTEM USED.</div> <div>D. HANGER RODS: INSTALL 1/4" DIAMETER OR LARGER STEEL RODS FOR TRAPEZES, SPRING STEEL FASTENERS, CLIPS AND CLAMPS. WIRE OR PERFORATED STRAPPINGS SHALL NOT BE USED FOR THE SUPPORT OF ANY CONDUIT OR EMT .</div> <div>E. FASTENING: FASTEN PIPE STRAPS AND HANGER RODS TO CONCRETE BY MEANS OF INSERTS OR EXPANSION BOLTS , TO BRICKWORK BY MEANS OF EXPANSION BOLTS, AND TO HOLLOW MASONRY BY MEANS OF TOGGLE BOLTS. WOODEN PLUGS AND SHIELDS SHALL NOT BE USED. POWER-DRIVEN FASTENERS MAY BE USED TO ATTACH PIPE STRAPS AND HANGER RODS TO CONCRETE WHERE APPROVED BY THE ARCHITECT. ALL CONDUITS NOT EMBEDDED IN CONCRETE SHALL BE FIRMLY SECURED BY MEANS OF PIPE CLAMPS, HANGERS, ETC., EQUAL TO CADDY FASTENERS OF ERICO PRODUCTS, INC., OR APPROVED EQUAL. WIRE WRAPPED AROUND CONDUITS AND SUPPORTING MEMBERS WILL NOT BE ACCEPTED. CONDUIT FASTENED TO THE WALL ABOVE THE CEILING IS NOT ACCEPTABLE.</div> <div>3.3 IDENTIFICATION: IDENTIFY PER SECTION 2601.00, PARAGRAPH 3.09F .</div> <div>3.4 CLOSING OF OPENINGS: WHEREVER SLOTS, SLEEVES OR OTHER OPENINGS ARE PROVIDED IN FLOORS OR WALLS FOR THE PASSAGE OF CONDUITS OR OTHER FORMS OF RACEWAY, INCLUDING BUS DUCTS, SUCH OPENINGS, IF UNUSED, OR THE SPACES LEFT IN SUCH OPENINGS, SHALL BE CLOSED IN A MANNER APPROVED BY THE ARCHITECT AND PER SECTION 13900. ALL CLOSURE MATERIAL ALONG WITH INSTALLATION METHODS SHALL RETAIN THE FIRE RATING INTEGRITY OF THE SURFACE BEING PENETRATED. ALL OPENINGS IN WALLS OR FLOORS REMAINING AFTER REMOVAL OF EXISTING CONDUITS, RACEWAYS, OR BUS DUCTS SHALL BE CLOSED IN A LIKE, APPROVED MANNER .</div> <div>END OF SECTION 26 1100</div> <div>SECTION 26 1200 - WIRES AND CABLES PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B. GENERAL PROVISIONS: SECTION 2601.00.</div> <div>C. GROUNDING: SECTION 264500.</div> <div>1.2 SUBMITTALS</div> <div>A. PRIMARY CABLE: SUBMIT CATALOG CUTS AND DESCRIPTIVE LITERATURE, INCLUDING DATA ON CONDUCTOR TYPE, VOLTAGE RATING, INSULATION TYPE AND THICKNESS, JACKET TYPE AND THICKNESS (IF ANY) AND EVIDENCE OF MEETING RESPECTIVE IPCEA STANDARDS.</div> <div>PART 2 PRODUCTS</div> <div>2.1 WIRES AND CABLES (600 VOLTS) A. TYPE:</div> <div>CONFORM TO THE APPLICABLE UL AND IPCEA STANDARDS FOR THE USE INTENDED. COPPER CONDUCTORS WITH 600 VOLT INSULATION UNLESS OTHERWISE SPECIFIED OR NOTED ON THE DRAWINGS. STRANDED CONDUCTORS FOR NO. 6 AND LARGER AND WHERE ELSEWHERE SPECIFIED OR NOTED ON THE DRAWINGS.</div> <div>ALL CONDUCTORS SHALL BE COPPER . ALUMINUM CONDUCTORS WILL BE PERMITTED ONLY ON 600 VOLT AND ABOVE SYSTEMS.</div> <div>B. INSULATIONS: TYPE THWN INSULATION UNLESS OTHERWISE SPECIFIED OR NOTED ON THE DRAWINGS. TYPE THWN MINIMUM OR TYPE XHHW FILLED CROSS-LINKED POLYETHYLENE 90 DEGREE C. THERMOSETTING INSULATION FOR CONDUCTORS LARGER THAN NO. 6 AND ELSEWHERE AS REQUIRED BY NEC. 90 DEGREES C. MINIMUM INSULATION WITHIN FIXTURE WIREWAYS OF FLOURESCENT FIXTURES.</div> <div>C. SIZE: NO. 12 MINIMUM UNLESS OTHERWISE SPECIFIED OR NOTED ON THE DRAWINGS. NOT LESS THAN</div> <div>NEC</div> <div>REQUIREMENTS FOR THE SYSTEM TO BE INSTALLED.</div> <div>D. COLOR CODING: PHASE, NEUTRAL AND GROUND CONDUCTORS COLOR-CODED IN ACCORDANCE WITH NEC. CONNECT ALL CONDUCTORS OF THE SAME COLOR TO THE SAME PHASE CONDUCTORS.</div> <div>PHASE A PHASE B PHASE C NEUTRAL</div> <div>20BY1120V3/PHASE BLACK RED 120/240V1/ PHASE BLACK BLUE WHITE RED 277/480V3/ PHASE BROWN ORANGE YELLOW GRAY</div> <div>GROUND SHALL BE GREEN FOR ALL SYSTEMS.</div> <div>E. CONDUCTORS NO. 12 AND 10 SHALL BE SOLID COLOR COMPOUNDED FOR THE ENTIRE LENGTH AND EACH LIKE COLOR SHALL BE CONNECTED ONLY TO THE PARTICULAR PHASE THROUGHOUT THE PROJECT. CONDUCTOR SIZES LARGER THAN NO. 10 MAY BE COLOR-CODED AT EACH TERMINATION AND IN EACH BOX OR ENCLOSURE WITH SIX INCHES OR HALF -LAPPED 3/4" PRESSURE SENSITIVE, PLASTIC TAPE OF RESPECTIVE COLORS IN LIEU OF SOLID COLOR COMPOUND.</div> <div>2.02 CONTROL CONDUCTORS: COPPER, MINIMUM SIZE NO. 14 WITH 19/35 STRANDING, COLOR-CODED FILLED CROSS LINKED POLYETHYLENE 90 DEGREE C. 600 VOLT INSULATION AND NEOPRENE OR EQUAL OUTER JACKET. EQUAL TO GENERAL ELECTRIC SI-58109 OR SI-58742. MULTI-CONDUCTOR CONDUIT CABLES SHALL BE PROVIDED WHERE MORE THAN THREE CONTROL CONDUCTORS ARE INSTALLED IN THE SAME CONDUIT BETWEEN COMMON TERMINATIONS. PROVIDE TWO SPARE CONDUCTORS MINIMUM IN EACH CONTROL CABLE.</div> <div>2.03 COMMUNICATION AND ELECTRONIC CABLE: AS REQUIRED OR SPECIFIED IN THE SECTION OF THESE SPECIFICATIONS SPECIFYING THE EQUIPMENT. SPLICES SHALL BE CRIMPED OR SOLDERED OR SHALL USE AN APPROVED CONNECTOR .</div> <div>2.04 VERTICAL CABLE SUPPORTS: SPLIT WEDGE TYPE SUPPORTS WHICH CLAMP EACH INDIVIDUAL CONDUCTOR AND TIGHTENS DUE TO WEIGHT OF THE CABLE SHALL BE USED WITHOUT METALLIC SHEATH.</div> <div>2.05 CONNECTORS AND LUGS</div> <div>A. FOR COPPER CONDUCTORS NO. 6 AND SMALLER: 3M SCOTCH -LOK OR T &amp; B STAK-IN, OR EQUAL COMPRESSION OR INDENT TYPE CONNECTORS WITH INTEGRAL OR SEPARATE INSULATING CAPS.</div> <div>B. FOR COPPER CONDUCTORS LARGER THAN NO. 6: SOLDERLESS, INDENT, HEX SCREW, OR BOLT -TYPE PRESSURE CONNECTORS, PROPERLY TAPED OR INSULATED.</div> <div>2.06 TAPE: PLASTIC TAPE, 8.5 MILS MINIMUM THICKNESS, 1,000,000 MEGOHMS MINIMUM INSULATION RESISTANCE, OIL RESISTANT VINYL BACKING, OIL RESISTANT ACRYLIC ADHESIVE, INCAPABLE OF SUPPORTING COMBUSTION PER ASTM D -1000. EQUAL TO 3-M SUPER 88 TAPE.</div> <div>2.07 FEEDER CIRCUITS: SINGLE CONDUCTOR FEEDER CABLES SHALL BE OF THE SIZE AND TYPE AS INDICATED ON THE DRAWINGS. SIZES SHOWN ARE FOR COPPER CONDUCTORS UNLESS OTHERWISE NOTED ON DRAWINGS.</div>	<div>2.08 BRANCH CIRCUITS</div> <div>A. BRANCH CIRCUITS SHALL BE NO. 12 AWG COPPER MINIMUM AND SHALL BE LARGER AWG SIZE WHERE INDICATED ON DRAWINGS. WHERE BRANCH CIRCUITS EXCEED 100 FT. IN LENGTH, THE AWG SIZE SHALL BE INCREASED TO ACCOMMODATE VOLTAGE DROP.</div> <div>B. BRANCH CIRCUITS TO ALL EQUIPMENT , FIXTURES AND OUTLETS SHALL INCLUDE A WHITE NEUTRAL AND GREEN WIRE EQUIPMENT GROUND.</div> <div>2.09 15 KV CABLES: SINGLE CONDUCTORS, SHIELDED, CONCENTRIC NEUTRAL, STRANDED ALUMINUM CROSS-LINKED POLYETHYLENE, OR ETHYLENE-PROPYLENE INSULATED, POLYVINYL JACKETED OR POLYETHYLENE JACKETED, 15 KV, FOR GROUNDED-NEUTRAL SERVICE ON A 24.9Y/14.4 KV SYSTEM, CONFORMING TO IPCEA SPECIFICATION S-61-402. CROSS-LINKED POLYETHYLENE INSULATION SHALL BE EXTENDED SINGLE WALL OF HEAT-STABILIZED AND LIGHT-STABILIZED, FILLED OR UNFILLED, CHEMICALLY-CROSS-LINKED POLYETHYLENE CONFORMING TO IPCEA SPECIFICATION S-61-524, AND RESISTANT TO ABRASION, WEATHER, FIRE OILS, CHEMICALS, HEAT, AGING, OZONE AND CORONA WITH HIGH DIELECTRIC AND IMPULSE STRENGTH. TEMPERATURE RATING NOT LESS THAN 90 DEGREE CENTIGRADE OVER A 40 DEGREE AMBIENT. THE CONDUCTOR SHALL BE ACCURATELY CENTERED IN THE INSULATION. 15 KV CABLES SHALL BE AS MANUFACTURED BY ANACONDA, GENERAL CABLE, GENERAL ELECTRIC, OKONTITE OR SIMPLEX. 15 KV CABLE SIZE SHALL BE NO. 10 UNLESS NOTED.</div> <div>2.10 TERMINATIONS: COLD SHRINK STRESS-RELIEF CONES SHALL BE INSTALLED AT ALL TERMINATIONS WHERE SHIELDED CABLE IS USED AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF ELECTRO-PRODUCTS DIVISION 3M .</div> <div>PART 3 EXECUTION</div> <div>3.01 WIRE AND CABLE TESTS (600 VOLTS): MEASURE THE INSULATING RESISTANCE OF SERVICE ENTRANCE CONDUCTORS, FEEDER CIRCUIT CONDUCTORS AND SERVICE GROUND. MEASUREMENTS SHALL BE TAKEN BETWEEN CONDUCTORS AND BETWEEN CONDUCTORS AND GROUND. RESISTANCE SHALL BE 1,000,000 OHMS OR MORE WHEN TESTED AT 500 VOLTS BY MEGGER WITHOUT BRANCH CIRCUIT LOADS. TESTS AND PROCEDURES SHALL MEET THE APPROVAL OF THE ARCHITECT, AND SHALL BE IN ACCORDANCE WITH THE APPLICABLE IPCEA STANDARDS FOR THE WIRES AND CABLES TO BE INSTALLED. FURNISH ALL INSTRUMENTS, EQUIPMENT AND PERSONNEL REQUIRED FOR TESTING, AND CONDUIT TESTS IN THE PRESENCE OF THE ARCHITECT. SUBMIT WRITTEN REPORTS OF THE TESTS AND RESULTS WHEN REQUESTED BY THE ARCHITECT.</div> <div>3.02 SPLICES (480 VOLTS AND UNDER): PERMITTED ONLY AT OUTLETS OR ACCESSIBLE ENCLOSURES. CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES UNLESS APPROVED BY THE ARCHITECT.</div> <div>3.03 PULL WIRES: IN EACH EMPTY CONDUIT, EXCEPT UNDERGROUND CONDUITS, INSTALL A PLASTIC LINE HAVING TENSILE STRENGTH OF NOT LESS THAN 200 POUNDS. IN EACH EMPTY UNDERGROUND CONDUIT, INSTALL A NO. 10 AWG BARE, HARD-DRAWN COPPER PULL WIRE OR A PLASTIC LINE HAVING A TENSILE STRENGTH OF NOT LESS THAN 200 POUNDS.</div> <div>3.04 RACEWAYS: INSTALL IN RIGID CONDUIT, EMT , OR FLEXIBLE METALLIC CONDUIT, UNLESS OTHERWISE SPECIFIED OR NOTED ON THE DRAWINGS.</div> <div>3.05 CABLE BENDS: RADIUS OR BENDS NOT LESS THAN TEN TIMES THE OUTER DIAMETER OF THE CABLE.</div> <div>3.06 CONDUCTOR PULL: CONDUCTORS SHALL NOT BE PULLED INTO CONDUITS UNTIL AFTER ALL PLASTERING OR CONCRETE WORK IS COMPLETED AND ALL CONDUITS IN WHICH MOISTURE COLLECTED HAVE BEEN SWABBED OUT.</div> <div>3.07 FEEDER IDENTIFICATION: TAG FEEDER CIRCUITS IN EACH ENCLOSURE WITH WRAP-AROUND CIRCUIT DESIGNATION LABELS.</div> <div>3.08 CONNECTORS AND LUGS: INSTALL WITH MANUFACTURER'S RECOMMENDED TOOLS AND WITH THE TYPE AND QUANTITY OF DEFORMATIONS RECOMMENDED BY MANUFACTURER.</div> <div>3.09 BUNDLING: CONDUCTORS NO. 10 AND SMALLER SHALL BE NEATLY AND SECURELY BUNDLED AND CONDUCTORS LARGER THAN NO. 10 SHALL BE NEATLY AND SECURELY CABLED IN INDIVIDUAL CIRCUITS, UTILIZING MARLIN TWINE, TWO-PLY LACING OR NYLON STRAPS.</div> <div>3.10 15 KV CABLE INSTALLATION: INSTALL AND TERMINATE 15 KV CABLES IN ACCORDANCE WITH THE MANUFACTURER'S APPROVED RECOMMENDATIONS. THE CONDUCTORS SHALL BE FREE OF KINKS AND TWISTS, AND ALL BENDS SHALL BE FORMED WITH SMOOTH RADIUS NOT SMALLER THAN TEN TIMES THE DIAMETER OF THE CABLE NOR SMALLER THAN THE MINIMUM RADIUS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS GREATER. INSTALL CABLES IN CONTINUOUS LENGTHS WITHOUT SPLICE UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS. INSTALL CABLE TERMINATIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS. ALL CABLES IN ONE CONDUIT SHALL BE PULLED IN TOGETHER, USING A SUITABLE PATENTED GRIP ON THE CONDUCTORS AND A BASKET WEAVE GRIP OVER THE INSULATION, ARRANGED SO THE STRESS OF PULLING IS APPLIED TO THE CONDUCTOR AND NOT THE INSULATION. LUBRICATE CABLES WITH CABLELUBE OR MINERALALL CABLE PULLING COMPOUND OF THE TYPE APPROVED BY THE CABLE MANUFACTURER AND ARCHITECT. SIMPLEX KITS ARE NOT ACCEPTABLE. MARK CABLES FOR PHASE IDENTIFICATION AT EACH TERMINATION BY MEANS OF BRAYD "ALL TEMPERATURE" MARKERS OR OTHER APPROVED MEANS. LEFT POSITION PHASE "A" BLACK; CENTER POSITION PHASE "B" RED; RIGHT POSITION PHASE "C" BLUE.</div> <div>3.11 15 KV CABLE TESTS</div> <div>A. SCOPE: TEST ALL 15 KV CABLES INSTALLED OR RECONNECTED UNDER THIS CONTRACT, INCLUDING THE ASSOCIATED SPLICES AND TERMINATIONS TO ASSURE THAT ALL MATERIAL CONTINUES TO POSSESS THE ORIGINAL CHARACTERISTICS AS REQUIRED BY THE GOVERNING CODES AND STANDARDS REFERENCED IN THESE SPECIFICATIONS AND AS RECOMMENDED BY THE CABLE MANUFACTURER . PERFORM ALL TESTS IN THE PRESENCE OF THE ARCHITECT AFTER THE CABLE IS INSTALLED BUT BEFORE LINE VOLTAGE IS APPLIED.</div> <div>B. TEST EQUIPMENT: FURNISH ALL INSTRUMENTS, EQUIPMENT AND PERSONNEL REQUIRED FOR THE TESTS AND PROVIDE THE SOURCE OF POWER REQUIRED FOR THE TEST EQUIPMENT.</div> <div>C. TEST PROCEDURES: WITH BOTH ENDS ISOLATED FROM TAP BOXES, AIR BREAK SWITCHES, TRANSFORMERS, ETC., THE VOLTAGE SHALL BE APPLIED BETWEEN THE CONDUCTOR AND THE METALLIC SHIELD AND THE RATE OF INCREASE TO THE SPECIFIED TEST VOLTAGE SHALL BE APPROXIMATELY UNIFORM AND SHALL BE NOT MORE THAN 100 PERCENT IN 10 SECONDS NOR LESS THAN 100 PERCENT IN 60 SECONDS. THE DURATION OF THE TEST SHALL BE FOR 15 MINUTES AT 35 KV. IT SHOULD BE NOTED THAT DUE TO CORONA AT THIS VOLTAGE, THE ENDS OF THE CABLE MAY HAVE TO BE INSULATED TO ACHIEVE A GOOD TEST.</div> <div>D. ACCEPTANCE TESTS SHALL BE IN ACCORDANCE WITH IPCEA PUBLICATION S-19-81 (FOURTH EDITION) FOR THE TYPE OF CABLE TO BE INSTALLED, AND AS APPROVED BY THE CABLE MANUFACTURER. TEST EQUIPMENT MAY BE EITHER DC OR AC, WITH TEST VOLTAGES AND WITHSTAND TIMES IN ACCORDANCE WITH IPCOA RECOMMENDATIONS. ADEQUATE CLEARANCES SHALL BE MAINTAINED BETWEEN THE CIRCUIT ENDS UNDER TEST AND GROUND TO OTHER EQUIPMENT TO PREVENT FLASHOVERS. CIRCUIT PHASES NOT UNDER TEST SHALL BE RAISED FROM ZERO TO THE PRESCRIBED VALUE WITH A RATE OF RISE NOT MORE THAN ONE KV PER SECOND, AND THE TEST VOLTAGE MAINTAINED AT THE PRESCRIBED VALUE FOR THE DESIGNATED TIME. THE TEST VOLTAGE SHALL THEN BE REDUCED TO ZERO AND THE RESIDUAL VOLTAGE ON THE CIRCUIT ALLOWED TO REDUCE TO 20% OF THE TEST VALUE BEFORE DISCHARGING AND DETERMINING THE WAVE FROM THE ALTERNATING CURRENT VOLTAGE. A SPHERE SPARK-GAP MAY BE USED TO MEASURE THE TEST VOLTAGE. AN APPROVED MEANS OF MEASURING THE TEST VOLTAGE DIRECTLY SHALL BE USED.</div> <div>E. TEST RESULTS: A REPORT OF THE TESTS SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT IN QUINTEPLICATE. THE REPORT SHALL LIST THE TEST EQUIPMENT USED, VOLTAGE, TIME APPLIED FOR EACH CABLE AND SHALL BEAR THE SIGNATURE OF THE CONTRACTOR AND THE PERSON IN CHARGE OF THE TESTS. IN THE EVENT THE TESTS, IN THE PRESENCE OF THE ARCHITECT, DO NOT MEET THE REQUIREMENTS, THE ENTIRE LENGTH OF CABLE SHALL BE REMOVED AND NEW CABLE INSTALLED AND TESTED AT NO ADDITIONAL COST TO THE OWNER.</div> <div>3.12 CABLE PULLING</div> <div>A. AFTER THE DUCT SYSTEM HAS BEEN COMPLETED AND PRIOR TO PULLING OF 15 KV CABLE, A MANOREL NOT LESS THAN 12 INCHES LONG, HAVING A DIAMETER APPROXIMATELY 1/4 INCH LESS THAN THE INSIDE DIAMETER, SHALL BE INSTALLED THROUGH THE DUCT. THE MANOREL SHALL BE THE TYPE MADE OF A SERIES OF SHARP CORNERED METAL DISCS EQUAL TO A "COPE CO. FLEXIBLE MANOREL." AFTER THIS, A ROUND BRUSH WITH STIFF BRISTLES SHALL BE PULLED THROUGH TO MAKE CERTAIN THAT NO FOREIGN MATERIAL IS LEFT IN THE RUN. THIS PROCEDURE SHALL ALSO BE FOLLOWED WHEN NEW CABLE IS TO BE PULLED INTO AN EXISTING DUCT.</div> <div>B. WHEN INSTALLING CABLE, THE SNATCH BLOCK FOR HOLDING THE PULLING ROPE SHALL BE SECURED SO THAT THE PULLING ROPE IS IN LINE WITH THE DUCT THROUGH WHICH POWER CABLE IS BEING PULLED. PULLING ROPE OR POWER CABLES AGAINST THE SURFACE OF THE END BELLS WILL NOT BE PERMITTED.</div> <div>3.13 WIRING FOR LOW -VOLTAGE SPECIAL SYSTEMS</div> <div>A. GENERAL: FOR THE PURPOSE OF THIS SPECIFICATION, THE WORD "CABLE" REFERS TO BOTH PROTECTED AND UNPROTECTED CABLE INSTALLATIONS. SPECIAL SYSTEMS REFERS TO TELEPHONE, TELEVISION, OVERHEAD PAGING, NURSE CALL, BUILDING AUTOMATION, SECURITY, DATA, AND FIRE ALARM SYSTEMS.</div> <div>B. PRODUCTS: APPROVED CABLING SHALL BE USED PER SECTION 260513.16, 2.03.</div> <div>C. PROTECTION REQUIREMENTS: ALL SPECIAL SYSTEMS CABLE RUNS INSIDE WALLS AND FLOORS SHALL BE IN RIGID CONDUIT OR BX. CABLE PER SECTION 260533. CABLES PLACED IN EXISTING WALLS MAY BE RUN IN FLEX IF APPROVED BY THE ARCHITECT IN ADVANCE. RUNS EXTERIOR TO WALLS AND FLOORS SHALL BE AS SHOWN IN THE TABLE BELOW:</div> <div>SYSTEM REQUIREMENT REFERENCE SECTION TELEPHONE APPROVED CABLE WITHOUT ADDITIONAL PROTECTION 16740, 16117 TELEVISION APPROVED CABLE WITHOUT ADDITIONAL PROTECTION NONE OVERHEAD PAGING APPROVED CABLE WITHOUT ADDITIONAL PROTECTION 16770 NURSE CALL APPROVED CABLE WITHOUT ADDITIONAL PROTECTION 16761 BUILDING AUTOMATION APPROVED CABLE WITHOUT ADDITIONAL PROTECTION DIVISION 17 FIRE ALARM APPROVED CABLE IN RIGID CONDUIT 16721 SECURITY APPROVED BX CABLE OR CABLE IN RIGID CONDUIT 16727</div> <div>D. ROUTING: ALL CABLE RUNS SHALL BE ROUTED TO AVOID PASSING NEAR SOURCES OF ELECTRICAL NOISE SUCH AS FLOURESCENT FIXTURES, POWER CONVERTERS, ETC. CABLE RUNS SHALL BE ROUTED TO AVOID PARALLELING HIGH VOLTAGE OR HIGH AMPERAGE ELECTRICAL WIRING. CABLE RUNS PARALLELING TELEPHONE CABLES SHALL HAVE A MINIMUM OF TWELVE INCH SEPARATION. THE ARCHITECT WILL AUTHORIZE WAIVERS (IN WRITING) FOR SPECIFIC CASES WHERE THE TWELVE INCH SEPARATION CANNOT BE MAINTAINED.</div> <div>E. HORIZONTAL INSTALLATION: HORIZONTAL CABLE RUNS SHALL BE INSTALLED PER SECTION 260533, 3.01 USING APPROPRIATE STRINGERS, J-HOOKS, CABLE TRAYS, AND ANY OTHER DEVICES NECESSARY SO NO CABLES ABOVE THE CEILING SHALL LAY ON THE CEILING. ELECTRICAL CONDUIT, CEILING SUSPENSION SYSTEM, PIPING, DUCTWORK OR ON ANY OTHER SYSTEMS INSTALLED IN THE AREA, THE CABLE SHALL NOT BE SUPPORTED BY ANY OF THE ABOVE MENTIONED SYSTEMS. ALL CABLE SHALL BE INSTALLED IN A NEAT AND ORDERLY MANNER, ABOVE OR WELL CLEAR OF EXISTING SYSTEMS. CABLE SHALL NOT BE INSTALLED BELOW EXISTING SYSTEMS OR ATTACHED TO EXISTING SYSTEMS EXCEPT ON SPECIFIC WRITING WAIVER BY THE ARCHITECT.</div> <div>F. VERTICAL INSTALLATION: ALL VERTICAL CABLE RUNS SHALL BE INSTALLED WITH APPROPRIATE STRAIN RELIEFS.</div> <div>G. CABLE IDENTIFICATION: IDENTIFY ALL CABLE PER SECTION 260533, 3.09 F. WIRING COLOR CODE SHALL BE APPROVED IN ADVANCE BY THE ARCHITECT AND MAINTAINED THROUGHOUT THE SCOPE OF THE WORK.</div> <div>H. RECORD DRAWINGS: PER SECTION 260533, 3.12, THE CONTRACTOR SHALL KEEP ACCURATE RECORDS OF THE CABLE INSTALLATION AND AT THE END OF THE CONTRACT SHALL TURN OVER TO THE ARCHITECT DOCUMENTATION SHOWING THE ROUTING AND LABELING OF ALL CABLING. THE FORMAT OF THIS DOCUMENTATION SHALL BE APPROVED BY THE ARCHITECT PRIOR TO BEGINNING WORK.</div>	<div>I. HAZARDOUS MATERIALS: THE CONTRACTOR SHALL NOT DISTURB ANY SPRAY -ON FIRE-PROOFING</div> <div>INSULATION ON ROOF PANELS OR SUPPORTING BEAMS WITHOUT THE APPROVAL OF THE ARCHITECT AND</div> <div>OWNER. SOME OF THIS MATERIAL CONTAINS ASBESTOS AND PROPER ABATEMENT PROCEDURES MUST BE</div> <div>FOLLOWED. DAMAGE OCCURRING TO EXISTING ASBESTOS DURING THE COURSE OF THE WORK SHALL BE</div> <div>REPAIRED AT THE EXPENSE OF THE CONTRACTOR .</div> <div>J. WALL AND FLOOR PENETRATIONS: ALL PENETRATIONS OF SMOKE AND FIRE WALLS AND FLOORS</div> <div>SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR . CONDUITS AND CABLES PENETRATING THESE WALLS</div> <div>AND FLOORS SHALL BE SLEEVED ACCORDING SECTION TO 260533, 3.01L, AND SEALED PER SECTION 260533.</div> <div>3.04 BOTH INSIDE AND OUT, WITH APPROVED FIRE RATED MATERIALS TO PREVENT THE PASSAGE OF SMOKE.</div> <div>FIRE AND SMOKE PENETRATIONS CAUSED BY THE REMOVAL OF EXISTING CABLE SHALL BE PROPERLY SEALED.</div> <div>THE CONTRACTOR SHALL NOT PENETRATE ANY FIRE WALL OR STRUCTURAL MEMBER WITHOUT SPECIFIC</div> <div>AUTHORIZATION BY THE ARCHITECT.</div> <div>K. EXISTING FINISHES: THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGE TO THE FINISHES (PAINT, WALLCOVERINGS, TILE, CARPET, CEILING TILE, ETC.) CAUSED BY THE CONTRACTOR OR HIS SUBS IN THE AREAS WHERE HE IS WORKING.</div> <div>L. CEILING TILE: ALL CEILING TILE REMOVED BY THE CONTRACTOR FOR CEILING ACCESS SHALL BE</div> <div>REPLACED AT THE END OF EACH WORKING DAY. EXCEPTIONS TO THIS REQUIREMENT SHALL BE APPROVED BY</div> <div>THE ARCHITECT AND OWNER .</div> <div>M. EQUIPMENT INSTALLATION: THE CONTRACTOR SHALL NOT INSTALL EQUIPMENT IN ANY EQUIPMENT ROOM , CLOSET, OR IN CEILING SPACES WITHOUT AUTHORIZATION FROM THE ARCHITECT AND OWNER . ALL EQUIPMENT SHALL BE INSTALLED IN NEMA ENCLOSURES. ALL WIRING ENTERING THESE ENCLOSURES SHALL BE PROPERLY SECURED AND PROTECTED.</div> <div>N. UNDERGROUND INSTALLATIONS: WHEN INSTALLING OR REMOVING UNDERGROUND CONDUIT</div> <div>INSTALLATIONS, COMPLY WITH</div> <div>SECTION 02200: EARTHWORK.</div> <div>O. CABLE TESTS: ALL CABLES SHALL BE TESTED BY THE CONTRACTOR TO INSURE THERE ARE NO GROUNDS, OPENS OR SHORTS. THE TESTS SHALL BE DONE AS APPROPRIATE TO THE TYPE CABLE BEING INSTALLED AND AS AGREED BETWEEN THE OWNER AND CONTRACTOR. ANY DEFICIENCY PERTAINING TO THESE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL FUNCTIONAL AND OPERATIONAL TESTS OF THE SYSTEM WITH NO CHARGE TO THE OWNER .</div> <div>END OF SECTION 26 1200</div> <div>SECTION 26 1300 - OUTLET BOXES PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B. GENERAL PROVISIONS: SECTION 2601.00</div> <div>C. GROUNDING: SECTION 264500. PART 2 PRODUCTS</div> <div>2.1 OUTLET BOXES</div> <div>A. CONSTRUCTION: ZINC -COATED OR CADMIUM PLATED SHEET STEEL BOXES OF A CLASS TO SATISFY THE CONDITIONS AT EACH OUTLET EXCEPT WHERE UNILET OR CONDULET BODIES ARE REQUIRED. KNOCKOUT TYPE WITH KNOCKOUTS REMOVED ARE REQUIRED. KNOCKOUT TYPE WITH KNOCKOUTS REMOVED ONLY WHERE NECESSARY TO ACCOMMODATE THE CONDUIT ENTERING. SQUARE CORNERED, STRAIGHT SIDED GANG BOXES, 4" OCTAGON CONCRETE RINGS AND 4" OCTAGON HUNG CEILING BOXES WITH BARS MAY BE FOLDED TYPE, ONE-PIECE DEEP -DRAWN FOR ALL OTHER BOXES.</div> <div>B. SIZE: TO ACCOMMODATE THE REQUIRED NUMBER AND SIZES OF CONDUITS, WIRES AND SPLICES IN ACCORDANCE WITH NEC REQUIREMENTS, BUT NOT SMALLER THAN SIZE SHOWN OR SPECIFIED. STANDARD CONCRETE TYPE BOXES NOT TO EXCEED SIX INCHES DEEP EXCEPT WHERE NECESSARY TO PERMIT ENTRANCE OF CONDUITS INTO SIDES OF BOXES WITHOUT INTERFERENCE WITH REINFORCING BARS. SPECIAL PURPOSE BOXES SHALL BE SIZED FOR THE DEVICE OR APPLICATION INDICATED.</div> <div>C. FIXTURE STUDS: 3/8" MALLEABLE IRON FIXTURE STUD IN OUTLET BOXES FOR CEILING LIGHTING FIXTURES AND INTERIOR BRACKET LIGHTING FIXTURES, OTHER THAN LAMP RECEPTACLES AND DROP CORDS.</div> <div>D. EXPOSED: SCREW -JOINT TYPE WITH GASKETED WEATHERPROOF COVERS IN LOCATIONS EXPOSED TO</div> <div>THE WEATHER.</div> <div>E. TILE BOXES: RECTANGULAR IN SHAPE WITH SQUARE CORNERS AND STRAIGHT SIDES FOR RECEPTACLES AND SWITCHES MOUNTED IN FURNITURE CABINETS OR IN GLAZED TILE, CONCRETE BLOCK, MARBLE, BRICK, STONE OR WOOD WALLS. INSTALL WITHOUT PLASTER RINGS.</div> <div>F. WALL-MOUNTED SWITCH, RECEPTACLE AND SIGNAL BOXES: UNLESS OTHERWISE NOTED OR SPECIFIED NOT LESS 4" SQUARE BY 1 -1/2" DEEP FOR 2 DEVICES AND MULTI -GANG BOXES FOR MORE THAN 2 DEVICES. BOXES FOR SWITCHES AND RECEPTACLES ON UNFINISHED WALLS MAY BE SCREW-JOINT TYPE WITH COVERS TO FIT THE DEVICES.</div> <div>G. WALL-MOUNTED TELEPHONE OUTLET BOXES: 4" SQUARE BY 2-1/8" DEEP UNLESS OTHERWISE</div> <div>NOTED IN THE</div> <div>DRAWINGS.</div> <div>H. LIGHT FIXTURE BOXES: 4" DIAMETER BY 1-1/2" DEEP MINIMUM FOR CEILING AND INTERIOR BRACKET FIXTURES WITH CONCEALED CONDUITS. PLASTER COVERS FOR BRACKET FIXTURES TO HAVE 3" DIAMETER OPENINGS. SCREW-JOINT BOXES WITH CANOPY SEAT FOR CEILING AND INTERIOR BRACKET FIXTURES WITH EXPOSED CONDUITS.</div> <div>I. GROUNDING TERMINAL: PROVIDE A GROUNDING TERMINAL IN EACH BOX CONTAINING A GREEN</div> <div>EQUIPMENT GROUND CONDUCTOR , OR SERVING MOTORS, LIGHTING FIXTURES OR RECEPTACLES.</div> <div>GROUNDING TERMINAL SHALL BE GREEN COLORED WASHER-IN -HEAD MACHINE SCREW OR GROUNDING</div> <div>BUSHING.</div> <div>2.2 PULLBOXES: MINIMUM NEC REQUIREMENTS UNLESS LARGER BOX IS NOTED. AS SPECIFIED FOR OUTLET BOXES WITH BLANK COVER FOR PULLBOXES WITH INTERNAL VOLUME NOT MORE THAN 150 CUBIC INCHES. AS SPECIFIED FOR CABINETS OR PULLBOXES WITH INTERNAL VOLUME OVER 150 CUBIC INCHES, EXCEPT COVERS TO HAVE SAME THICKNESS AS BOX WITH CORROSION-RESISTANT SCREW OR BOLT ATTACHMENT.</div> <div>2.3 FLOOR BOXES: HEAVY DUTY, CAST, ADJUSTABLE TYPE, SUITABLE FOR THE DEVICE OR APPLICATION INTENDED, UNLESS NOTED. PROVIDE METAL CARPET FLANGES IN CARPETED AREAS.</div> <div>PART 3 EXECUTION</div> <div>3.1 OUTLET BOXES</div> <div>A. INSTALLATION: UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS, OUTLET BOXES SHALL BE FLUSH MOUNTED AND THE FRONT EDGES OF THE BOXES OR PLASTER COVERS SHALL BE FLUSH WITH THE FINISHED WALL OR CEILING LINE OR IF INSTALLED IN WALLS AND CEILING OF INCOMBUSTIBLE CONSTRUCTION, NOT MORE THAN THE THIN BACK OF SAME. MOUNT BOXES WITH THE LONG AXIS OF DEVICES VERTICAL, UNLESS OTHERWISE SPECIFIED. BOXES IN PLASTERED WALLS AND CEILINGS SHALL BE PROVIDED WITH PLASTER COVERS. BOX EXTENSIONS AND/OR COVERS WILL NOT BE PERMITTED. INSTALL IN A RIGID AND SATISFACTORY MANNER WITH SUITABLE METAL BAR HANGER , BOX CLEATS, ADJUSTABLE BOX HANGERS, ETC. USE WOOD SCREWS ON WOOD, EXPANSION SHIELDS ON MASONRY AND MACHINE SCREWS ON STEEL WORK. BOXES SHALL BE SECURED TO METAL STUDS WITH SHEET METAL SCREWS. METAL STUD CLIPS, SUCH AS CADDY "MSF", ARE NOT ACCEPTABLE. ALL BOXES SHALL HAVE FAR SIDE BOX SUPPORTS INSTALLED SIMILAR TO CADDY #766.</div> <div>B. MOUNTING HEIGHTS: THE MOUNTING HEIGHT OF A WALL-MOUNTED OUTLET BOX SHALL BE CONSTRUED TO MEET THE HEIGHT FROM THE FINISHED FLOOR TO THE HORIZONTAL CENTERLINE OF THE COVER PLATE. ON EXPOSED TILE, BLOCK OR BRICK CONSTRUCTION, MOUNT OUTLET BOXES AT THE NEAREST BED JOINT TO THE MOUNTING HEIGHT INDICATED. THE HEIGHT OF ALL OUTLETS SHALL BE AT THE SAME HEIGHT WHEN</div>	<div></div> <div><div>R<sup>2</sup> ARCHITECTURAL DESIGN</div><div>730 SAN MATEO BLVD SE, SUITE 1</div><div>ALBUQUERQUE, NEW MEXICO 87108</div><div>TEL: 505.792.6224 FAX: 888.892.5814</div></div>	<div>JH</div> <div>SA</div> <div>2/13/17</div> <div>AS SHOWN</div> <div><div>SANTA FE MOUNTAIN CENTER</div><div>1160 PARKWAY DRIVE SUITES A &amp; B</div><div>SANTA FE, NM</div><div>ELECTRICAL SPECIFICATIONS</div></div> <div>-SHEET-</div> <div>E002</div>
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<div>C. WALL MOUNTED SWITCH, RECEPTACLE AND SIGNAL OUTLETS: ON COLUMNS, PILASTERS, ETC., MOUNT SO THE CENTERS OF THE COLUMNS ARE CLEAR FOR FUTURE INSTALLATION OF PARTITIONS. INSTALL OUTLET BOXES NEAR DOORS OR WINDOWS CLOSE TO THE TRIM. INSTALL OUTLET BOXES NEAR THE DOORS OR THE LOCK SIDES AS SHOWN ON ARCHITECTURAL DRAWINGS UNLESS OTHER LOCATIONS ARE APPROVED BY THE ARCHITECT.</div> <div>3.2 PULLBOXES: PROVIDE ADDITIONAL PULLBOXES WHEREVER NECESSARY TO MEET REQUIREMENTS FOR MAXIMUM LENGTHS OF CONDUIT RUNS AND MAXIMUM NUMBERS OF BENDS AS SPECIFIED UNDER "CONDUIT AND FITTINGS".</div> <div>3.3 FLOOR BOXES: INSTALL LEVEL WITH TOP COVERS ADJUSTED FLUSH WITH FINISHED FLOOR OR FLOOR TILE.</div> <div>3.4 FIXTURE CONNECTIONS: RECESSED OR SURFACE LIGHT FIXTURES IN LAY-IN OR ACCESSIBLE CEILINGS SHALL BE CONNECTED WITH MINIMUM 1/2" FLEXIBLE METALLIC CONDUITS, 4 TO 6 FEET LONG WITH GROUNDING PROVISIONS.</div> <div>3.5 IDENTIFICATION: IDENTIFY ALL EXPOSED JUNCTION AND PULLBOXES ACCORDING TO THE SYSTEM CARRIED BY MEANS OF PAINTED-ON STENCILS OR LABELS WITH LEGIBLE LETTERS AND CONTRASTING COLORS WITHOUT ABBREVIATIONS. IN GENERAL, USE YELLOW COLOR . PAINTING SHALL BE IN ACCORDANCE WITH DIVISION . FINISHES.</div> <div>END OF SECTION 26 1300</div> <div>SECTION 26 1330 - CABINETS PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B . GENERAL PROVISIONS: SECTION 260100.</div> <div>C. GROUNDING: SECTION 264500. PART 2 PRODUCTS</div> <div>2.1 GENERAL: SHEET STEEL EXCEPT THOSE EXPOSED TO WET OR RAIN CONDITIONS THAT SHALL BE RAIN-TIGHT UNLESS OTHERWISE NOTED. CABINETS WITHOUT THROUGH FEEDER WIRING SHALL BE ARRANGED TO PROVIDE A WIRING GUTTER NOT LESS THAN 4" WIDE FOR BRANCH CIRCUIT PANELBOARDS SERVED BY FEEDERS UP TO 40; PANELBOARDS SERVED BY FEEDERS IN EXCESS OF 40, UP TO AND INCLUDING 750 MCM, SHALL BE PROVIDED WITH TOP, BOTTOM AND SIDE GUTTERS 8" WIDE. PANELBOARD CABINETS IN ALL CASES SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF ARTICLE 373-6 OF THE NATIONAL ELECTRICAL CODE. CABINETS SHALL BE OF STANDARD MAKE AND SHALL BE EQUAL IN ALL RESPECTS TO THOSE BEARING THE UNDERWRITERS LABORATORIES LABEL. CABINETS, INCLUDING BOXES SHALL BE MADE OF GALVANIZED STEEL. ALL OUTSIDE SURFACES OF TRIM AND DOORS SHALL BE GIVEN A FACTORY FINISH COAT OF NO. 61 AND/ GRAY PAINT, OR APPROVED MANUFACTURER'S STANDARD. CABINET FOR TELEPHONE AND COMMUNICATIONS SYSTEMS SHALL HAVE 5/8" EXTERIOR GRADE, ONE-FACE B-GRADE OR EQUAL PLYWOOD BACKBOARD INSIDE WITH MAXIMUM HEIGHT AND WIDTH.</div> <div>2.2 FEED THROUGH GUTTERS: WHERE FEEDERS GO THROUGH PANELBOARD CABINETS TO SERVE PANELBOARDS ABOVE OR BEYOND, THE WIRING GUTTERS IN PANELBOARD CABINETS SHALL BE A MINIMUM OF 8" ON SIDES, TOP AND BOTTOM .</div> <div>2.3 FRONTS: ONE PIECE SHEET STEEL FRAME AND A HINGED DOOR WITH CATCH AND LOCK FOR FLUSH CABINETS. TELEPHONE AND SIGNAL CABINETS FOR SURFACE MOUNTING SHALL BE EQUIPPED WITH A DOOR HINGED DIRECTLY TO CABINET. ONE PIECE SHEET STEEL WITH 3/4" FLANGE WITH ALL EDGES SHAPED TO COVER EDGE OF BOX. FRONTS MAY BE SECURED TO BOX BY MEANS OF FLATHEAD SCREWS WITH CAPTIVE NUTS OR CLAMPS.</div> <div>2.4 DOORS: DOORS SHALL CLOSE AGAINST A RABBIT PLACED ALL AROUND THE INSIDE EDGE OF THE FRAME WITH A CLOSE FITTING JOINT BETWEEN DOOR AND FRAME. THE DOORS SHALL BE FITTED WITH SUBSTANTIAL FLUSH HINGES PLACED NOT OVER 24" APART, NOR MORE THAN 6" FROM ENDS OF DOORS, AND FASTENED PERMANENTLY TO THE DOOR AND FRAME WITH FLAT-HEADED RIVETS OR SPOT WELDS, OR WITH CONCEALED FLUSH PIANO HINGES. FASTENING SCREWS OF FRONTS SHALL BE SET NOT OVER 24" APART. DOORS OVER 48" IN HEIGHT SHALL BE EQUIPPED WITH A VAULT HINGE AND A THREE POINT CATCH.</div> <div>2.5 DOOR-IN-DOOR: BOTH SURFACE AND FLUSH CABINETS SHALL BE DOOR-IN-DOOR. THE DOOR OVER THE INTERIOR OF THE CABINET SHALL BE PROVIDED WITH HINGES AND COMBINED LOCK AND LATCH. THE OUTSIDE DOOR OVER THE CABINET GUTTERS SHALL HAVE A HINGE ON ONE SIDE, AND MACHINE SCREWS INTO THREADED HOLES IN THE CABINET ON THE OTHER THREE SIDES. IN ORDER TO INSURE THE RIGIDITY OF THE OUTSIDE DOOR, SURFACE TYPE CABINETS SHALL HAVE A 1/2" DEEP LIP BENT OVER ALL AROUND, WITH THE CORNERS WELDED AND GROUNDED; OR IN THE CASE OF FLUSH CABINETS, A STEEL ANGLE FRAME, EQUIVALENT IN STRENGTH TO THE BENT OVER LIP, SHALL BE WELDED TO THE INSIDE OF THE DOOR. THE OUTSIDE DOOR SHALL BE OF SUCH SIZE AS TO ALLOW A MINIMUM OF 2-3/4" OPENING TO ALL FOUR SIDES OF THE WIRING GUTTER. ALL LOCKS SHALL BE KEYPED ALIKE.</div> <div>2.6 LOCKS: FURNISH EACH CABINET WITH A COMBINATION CATCH AND FLAT KEY LOCK. THE TELEPHONE, ELECTRICAL AND SIGNAL CABINET LOCKS SHALL BE FITTED TO SEPARATE KEYING FOR EACH SYSTEM . FURNISH TWO KEYS FOR EACH CABINET.</div> <div>2.7 GROUND BAR: EACH CABINET FOR A PANELBOARD SHALL BE PROVIDED WITH A COPPER INTERIOR GROUND BAR SUITABLY BRACED OR BOLTED TO THE CABINET WALL. THE EQUIPMENT GROUND BAR SHALL BE EQUIVALENT IN CURRENT CARRYING PRESSURE CONNECTOR TERMINATIONS FOR THE ASSOCIATED FEEDERS, BRANCH CIRCUITS, ETC.</div> <div>PART 3 EXECUTION</div> <div>3.1 CABINETS: CABLES INSTALLED IN THE WIRING GUTTERS OF CABINETS SHALL BE NEATLY BUNDLED, ROUTED AND SUPPORTED. MINIMUM BENDING RADII AS RECOMMENDED BY THE CABLE MANUFACTURER SHALL NOT BE REDUCED. LIGHTING AND POWER CABINETS SHALL BE INSTALLED WITH TOPS 6'-6" ABOVE FLOOR AND BOTTOMS NOT LESS THAN 12" ABOVE FLOOR. THE HEIGHT ABOVE FLOOR OF THE HIGHEST OVER CURRENT DEVICE HANDLE SHALL NOT EXCEED 6'-0".</div> <div>END OF SECTION 26 1300</div> <div>SECTION 26 1400 - WIRING DEVICES PART 1 - GENERAL</div> <div>1.1 DESCRIPTION</div> <div>A. THIS SECTION SPECIFIES THE FURNISHING, INSTALLATION AND CONNECTION OF WIRING DEVICES.</div> <div>1.2 RELATED WORK</div> <div>A. SECTION 26 01 00, GENERAL PROVISIONS: GENERAL ELECTRICAL REQUIREMENTS THAT ARE COMMON TO MORE THAN ONE SECTION.</div> <div>B. SECTION 26 13 00, OUTLET BOXES: CONDUITS AND OUTLETS BOXES. C. SECTION 26 1400, WIRES AND CABLES: CABLES AND WIRING.</div> <div>D. SECTION 26 45 00, GROUNDING: REQUIREMENTS FOR PERSONNEL SAFETY AND TO PROVIDE A LOW IMPEDANCE PATH TO GROUND FOR POSSIBLE GROUND FAULT CURRENTS.</div> <div>1.3 SUBMITTALS</div> <div>A. IN ACCORDANCE WITH SECTION 260100 GENERAL PROVISIONS , SUBMIT THE FOLLOWING:</div> <div>B. SHOP DRAWINGS:</div> <div>a. SUFFICIENT INFORMATION, CLEARLY PRESENTED, SHALL BE INCLUDED TO DETERMINE COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.</div> <div>b. INCLUDE ELECTRICAL RATINGS, DIMENSIONS, MOUNTING DETAILS, CONSTRUCTION MATERIALS, GRADE AND TERMINATION INFORMATION.</div> <div>c. MANUALS: TWO WEEKS PRIOR TO FINAL INSPECTION, DELIVER FOUR COPIES OF THE FOLLOWING TO THE RESIDENT ENGINEER: TECHNICAL DATA SHEETS AND INFORMATION FOR ORDERING REPLACEMENT UNITS.</div> <div>d. CERTIFICATIONS: TWO WEEKS PRIOR TO FINAL INSPECTION, SUBMIT FOUR COPIES OF THE FOLLOWING TO THE RESIDENT ENGINEER: CERTIFICATION BY THE CONTRACTOR THAT THE DEVICES COMPLY WITH THE DRAWINGS AND SPECIFICATIONS, AND HAVE BEEN PROPERLY INSTALLED, ALIGNED, AND TESTED.</div> <div>1.4 APPLICABLE PUBLICATIONS</div> <div>A. PUBLICATIONS LISTED BELOW (INCLUDING AMENDMENTS, ADDENDA, REVISIONS, SUPPLEMENTS AND ERRATA) FORM A PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED. PUBLICATIONS ARE REFERENCED IN THE TEXT BY BASIC DESIGNATION ONLY.</div> <div>B. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA):</div> <div>70-02 ..... NATIONAL ELECTRICAL CODE (NEC)</div> <div>C. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA):</div> <div>WD 1-99 ..... GENERAL COLOR REQUIREMENTS FOR WIRING DEVICES</div> <div>WD 6-02 ..... WIRING DEVICES - DIMENSIONAL REQUIREMENTS</div> <div>D. UNDERWRITERS LABORATORIES, INC. (UL):</div> <div>5-98 ..... SURFACE METAL RACEMAYS AND FITTINGS</div> <div>20-00 ..... GENERAL-USE SNAP SWITCHES</div> <div>231-98 ..... POWER OUTLETS</div> <div>467-93 ..... GROUNDING AND BONDING EQUIPMENT</div> <div>498-01 ..... ATTACHMENT PLUGS AND RECEPTACLES</div> <div>943-03 ..... GROUND-FAULT CIRCUIT - INTERRUPTERS</div> <div>PART 2 - PRODUCTS</div> <div>2.1 RECEPTACLES</div> <div>A. GENERAL: ALL RECEPTACLES SHALL BE LISTED BY UNDERWRITERS LABORATORIES, INC., AS HOSPITAL GRADE (GREEN DOT IDENTIFICATION) AND CONFORM TO NEMA WD 1 (EXCEPTION - RECEPTACLE TYPES WHICH HAVE NO LISTING AS HOSPITAL GRADE BUT ARE LISTED BY UL IN THEIR RESPECTIVE CATEGORIES OR RECEPTACLES INDICATED ON THE DRAWINGS AS "NOT HOSPITAL GRADE") .</div> <div>1. MOUNTING STRAPS SHALL BE PLATED STEEL, WITH BREAK -OFF PLASTER EARS AND SHALL INCLUDE A SELF -GROUNDING FEATURE. TERMINAL SCREWS SHALL BE BRASS, BRASS PLATED OR A COPPER ALLOY METAL.</div> <div>2. RECEPTACLES SHALL HAVE PROVISIONS FOR BACK WIRING WITH SEPARATE METAL CLAMP TYPE TERMINALS (FOUR MIN.) AND SIDE WIRING FROM FOUR CAPTIVELY HELD BINDING SCREWS.</div> <div>B. DUPLEX RECEPTACLES SHALL BE SINGLE PHASE, 20 AMPERE, 120 VOLTS, 2-POLE, 3 -WIRE, AND CONFORM TO THE NEMA 5-20R CONFIGURATION IN NEMA WD 1 HEAVY DUTY TYPE. THE DUPLEX TYPE SHALL HAVE BREAK -OFF FEATURE FOR TWO- CIRCUIT OPERATION. THE UNGROUNDED POLE OF EACH RECEPTACLE SHALL BE PROVIDED WITH A SEPARATE TERMINAL.</div> <div>1. BODIES SHALL BE IVORY IN COLOR .</div> <div>2. SWITCHED DUPLEX RECEPTACLES SHALL BE WIRED SO THAT ONLY THE TOP RECEPTACLE IS SWITCHED. THE REMAINING RECEPTACLE SHALL BE UNSWITCHED.</div> <div>3. GROUND FAULT INTERRUPTER DUPLEX RECEPTACLES: SHALL BE AN INTEGRAL UNIT SUITABLE FOR MOUNTING IN A STANDARD OUTLET BOX.</div> <div>a. GROUND FAULT INTERRUPTER CONSISTS OF A DIFFERENTIAL CURRENT TRANSFORMER , SOLID STATE SENSING CIRCUITRY AND A CIRCUIT INTERRUPTER SWITCH. IT SHALL BE RATED FOR OPERATION ON A 60 HZ, 120 VOLT, 20 - AMPERE BRANCH CIRCUIT. DEVICE SHALL HAVE NOMINAL SENSITIVITY TO GROUND LEAKAGE CURRENT OF FIVE MILLIAMPERES AND SHALL FUNCTION TO INTERRUPT THE CURRENT SUPPLY FOR ANY VALUE OF GROUND LEAKAGE CURRENT ABOVE FIVE MILLIAMPERES (+ OR - 1 MILLIAMP) ON THE LOAD SIDE OF THE DEVICE. DEVICE SHALL HAVE A MINIMUM NOMINAL TRIPPING TIME OF 1/30TH OF A SECOND. DEVICES SHALL MEET UL 943.</div> <div>4. SAFETY TYPE DUPLEX RECEPTACLES:</div> <div>a. BODIES SHALL BE IVORY IN COLOR .</div> <div>b. SHALL BE WITH THE FOLLOWING ADDITIONAL REQUIREMENTS.</div> <div>1) SHALL PERMIT CURRENT TO FLOW ONLY WHILE A STANDARD PLUG IS IN THE PROPER POSITION IN THE RECEPTACLE.</div> <div>2) SCREWS EXPOSED WHILE THE WALL PLATES ARE IN PLACE SHALL BE THE TAMPERPROOF TYPE.</div> <div>c. SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:</div> <div>1) HOUSEKEEPING QUARTERS, BUILDINGS, WAITING AREAS AND LOBBIES WHERE CHILDREN MIGHT BE PRESENT.</div> <div>C. RECEPTACLES: 20, 30 AND 50 AMPERE, 250 VOLTS: SHALL BE COMPLETE WITH APPROPRIATE CORD GRIP PLUG. DEVICES SHALL MEET UL 231.</div> <div>D. WEATHERPROOF RECEPTACLES: SHALL CONSIST OF A DUPLEX RECEPTACLE, MOUNTED IN BOX WITH A GASKETED, WEATHERPROOF, CAST METAL COVER PLATE AND CAP OVER EACH RECEPTACLE OPENING. THE CAP SHALL BE PERMANENTLY ATTACHED TO THE COVER PLATE BY A SPRING-HINGED FLAP. THE WEATHERPROOF INTEGRITY SHALL NOT BE AFFECTED WHEN HEAVY DUTY SPECIFICATION OR HOSPITAL GRADE ATTACHMENT PLUG CAPS ARE INSERTED: COVER PLATES ON OUTLET BOXES MOUNTED FLUSH IN THE WALL SHALL BE GASKETED TO THE WALL IN A WATERTIGHT MANNER .</div> <div>E. LAMP RECEPTACLES FOR OUTLET BOX MOUNTING:</div> <div>1. FOR USE ON STANDARD 75 MM (3 INCH) AND 100 MM (4 INCH) OUTLET BOXES.</div> <div>2. KEYLESS PORCELAIN BODY AND SKIRT SUPPORTING A MEDIUM SCREW SHELL SOCKET, AND INTEGRAL 3 -WIRE GROUNDING RECEPTACLE SHALL HAVE SCREW TERMINALS AND A MINIMUM RATING OF 600 WATTS.</div> <div>3. PORCELAIN NECK SHALL HAVE SHADE HOLDER GROOVE.</div> <div>2.2 TOGGLE SWITCHES AND DIMMERS</div> <div>A. TOGGLE SWITCHES SHALL BE TOTALLY ENCLOSED TUMBLER TYPE WITH BODIES OF PHENOLIC COMPOUND. TOGGLE HANDLES SHALL BE IVORY IN COLOR UNLESS OTHERWISE SPECIFIED. THE ROCKER TYPE SWITCH IS NOT ACCEPTABLE AND WILL NOT BE APPROVED.</div> <div>1. SWITCHES INSTALLED IN HAZARDOUS AREAS SHALL BE EXPLOSION PROOF TYPE IN ACCORDANCE WITH THE NEC AND AS SHOWN ON THE DRAWINGS.</div> <div>2. SHALL BE SINGLE UNIT TOGGLE, BUTT CONTACT, QUIET AC TYPE, HEAVY -DUTY GENERAL -PURPOSE USE WITH AN INTEGRAL SELF GROUNDING MOUNTING STRAP WITH BREAK -OFF PLASTERS EARS AND PROVISIONS FOR BACK WIRING WITH SEPARATE METAL WIRING CLAMPS AND SIDE WIRING WITH CAPTIVELY HELD BINDING SCREWS.</div> <div>3. SHALL BE COLOR CODED FOR CURRENT RATING, LISTED BY UNDERWRITERS LABORATORIES, INC., AND MEET THE REQUIREMENTS OF NEMA WD 1, HEAVY -DUTY AND UL 20.</div> <div>4. RATINGS:</div> <div>a. 120 VOLT CIRCUITS: 20 AMPERES AT 120-277 VOLTS AC. B. 277 VOLT CIRCUITS: 20 AMPERES AT 120-277 VOLTS AC.</div> <div>5. THE SWITCHES SHALL BE MOUNTED ON THE STRIKER PLATE SIDE OF DOORS.</div> <div>6. INCORPORATE BARRIERS BETWEEN SWITCHES WITH MULTIGANG OUTLET BOXES WHERE REQUIRED BY THE NEC.</div> <div>7. SWITCHES CONNECTED TO ISOLATED TYPE ELECTRICAL POWER SYSTEMS SHALL BE DOUBLE POLE.</div> <div>8. ALL TOGGLE SWITCHES SHALL BE OF THE SAME MANUFACTURER. B . DIMMERS: INCANDESCENT MODULAR DIMMING SYSTEMS.</div> <div>1. INCANDESCENT DIMMING SYSTEM SHALL BE 2000 WATT MODULAR TYPE, WITH CAPABILITY FOR "SLAVING" LARGER LOADS FROM THE "MASTER" SYSTEM SHALL HAVE CAPABILITY OF ADDING ADDITIONAL "SLAVES" CONTROLLED FROM THE ORIGINAL BASIC DIMMER "MASTER". ALL UNITS SHALL TRACK WITH "MASTER". CONTROL UNITS SHALL BE SINGLE-PHASE MANUAL CONTROL AS SHOWN ON THE DRAWINGS. DIMMERS SHALL HAVE LOW AND INTENSITY ADJUSTMENT AND BUILT -IN TRANSIENT VOLTAGE PROTECTION AND FUSED ON THE LOAD SIDE. ALL REMOTE MOUNTED UNITS SHALL BE COMPLETELY ENCLOSED IN INTEGRAL METAL HOUSING. "MASTER", "SLAVES" AND CONTROLS SHALL BE OF THE SAME MANUFACTURER. ALL DIMMERS SHALL BE LISTED BY UNDERWRITERS LABORATORIES, INC.</div> <div>C. DIMMERS: INCANDESCENT LAMP LOADS: WALL-MOUNTED INCANDESCENT DIMMERS SHALL BE SPECIFICATION GRADE WITH CAPABILITY OF RAISING AND LOWERING THE LIGHTING FROM COMPLETELY OFF AT EXTREME COUNTER-CLOCKWISE ROTATION, TO FULL INTENSITY. DIMMERS SHALL INCLUDE AN "OFF" POSITION. DIMMERS SHALL MAINTAIN FULL LOAD RATING EVEN WHEN TWO OR MORE UNITS ARE INSTALLED ADJACENT TO ONE ANOTHER . ALL WALL-MOUNTED DIMMERS SHALL BE OF THE SAME MANUFACTURER .</div> <div>D. DIMMERS: FLUORESCENT LAMP LOADS: WALL-MOUNTED FLUORESCENT LAMP DIMMERS SHALL BE SPECIFICATION GRADE WITH LARGE CONTROL KNOB AND SHALL BE CAPABLE OF RAISING AND LOWERING THE LIGHTING FROM COMPLETELY OFF AT EXTREME COUNTER-CLOCKWISE ROTATION, TO FULL INTENSITY. DIMMERS SHALL INCLUDE AN "OFF" POSITION. DIMMERS SHALL HAVE LOW END INTENSITY ADJUSTMENT AND MAINTAIN FULL LOAD RATING EVEN WHEN TWO OR MORE UNITS ARE INSTALLED ADJACENT TO ONE ANOTHER .</div> <div>ALL WALL-MOUNTED DIMMERS SHALL BE OF THE SAME MANUFACTURER . DIMMING BALLAST SHALL BE PROVIDED FOR EACH F32 RAPID START LAMP OR PAIR OF LAMPS. DIMMERS SHALL HAVE ADEQUATE CAPACITY FOR THE LOAD SERVED AND THE ENVIRONMENT IN WHICH INSTALLED.</div> <div>2.3 WALL PLATES</div> <div>A. WALL PLATES FOR SWITCHES AND RECEPTACLES SHALL BE BRUSHED STAINLESS STEEL. OVERSIZE PLATES ARE NOT ACCEPTABLE.</div> <div>B. STANDARD NEMA DESIGN, SO THAT PRODUCTS OF DIFFERENT MANUFACTURERS WILL BE INTERCHANGEABLE. DIMENSIONS FOR OPENINGS IN WALL PLATES SHALL BE ACCORDANCE WITH NEMA WD1.</div> <div>C. FOR RECEPTACLES OR SWITCHES MOUNTED ADJACENT TO EACH OTHER , WALL PLATES SHALL BE COMMON FOR EACH GROUP OF RECEPTACLES OR SWITCHES.</div> <div>D. WALL PLATES FOR DATA, TELEPHONE OR OTHER COMMUNICATION OUTLETS SHALL BE AS SPECIFIED IN THE ASSOCIATED SPECIFICATION.</div> <div>2.4 SURFACE MULTIPLE -OUTLET ASSEMBLIES</div> <div>A. ASSEMBLIES SHALL CONFORM TO THE REQUIREMENTS OF NFPA 70 AND UL 5. B . SHALL HAVE THE FOLLOWING FEATURES:</div> <div>1. ENCLOSURES:</div> <div>a. THICKNESS OF STEEL SHALL BE NOT LESS THAN 1 MM (0.040 INCH) STEEL FOR BASE AND COVER . NOMINAL DIMENSION SHALL BE 40 BY 70 MM (1-1/2 BY 2-3/4 INCHES) WITH INSIDE CROSS SECTIONAL AREA NOT LESS THAN 2250 SQUARE MM (3.5 SQUARE INCHES) . THE ENCLOSURES SHALL BE THOROUGHLY CLEANED, PHOSPHATIZED AND PAINTED AT THE FACTORY WITH PRIMER AND THE MANUFACTURER'S STANDARD BAKED ENAMEL OR LACQUER FINISH.</div> <div>2. RECEPTACLES SHALL BE DUPLEX, HOSPITAL GRADE. SEE PARAGRAPH 'RECEPTACLES' IN THIS SECTION. DEVICE COVER PLATES SHALL BE THE MANUFACTURER'S STANDARD CORROSION RESISTANT FINISH AND SHALL NOT EXCEED THE DIMENSIONS OF THE ENCLOSURE.</div> <div>3. UNLESS OTHERWISE SHOWN ON DRAWINGS, SPACING OF THE RECEPTACLES ALONG THE STRIP SHALL BE 600 MM (24 INCHES) ON CENTERS.</div> <div>4. WIRES WITHIN THE ASSEMBLIES SHALL BE NOT LESS THAN NO. 12 AWG COPPER , WITH 600 VOLT RATINGS.</div> <div>5. INSTALLATION FITTINGS SHALL BE DESIGNED FOR THE STRIPS BEING INSTALLED INCLUDING BENDS, OFFSETS, DEVICE BRACKETS, INSIDE COUPLINGS, WIRE CLIPS, AND ELBOWS.</div> <div>6. BOND THE STRIPS TO THE CONDUIT SYSTEMS FOR THEIR BRANCH SUPPLY CIRCUITS.</div> <div>PART 3 - EXECUTION (PART 3 - PRT)</div> <div>3.1 INSTALLATION</div> <div>A. INSTALLATION SHALL BE IN ACCORDANCE WITH THE NEC AND AS SHOWN AS ON THE DRAWINGS.</div> <div>B. GROUND TERMINAL OF EACH RECEPTACLE SHALL BE BONDED TO THE OUTLET BOX WITH AN APPROVED GREEN BONDING JUMPER , AND ALSO CONNECTED TO THE GREEN EQUIPMENT GROUNDING CONDUCTOR .</div> <div>END OF SECTION 26 1 400</div> <div>SECTION 26 1500 - MOTORS</div> <div>PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION.</div> <div>B. GENERAL PROVISIONS: SECTION 26 0100.</div> <div>C. GROUNDING: SECTION 26 4500. PART 2 PRODUCTS</div> <div>2.1 GENERAL: MOTORS WILL BE FURNISHED WITH THE EQUIPMENT THEY ARE INTENDED TO OPERATE AND THEREFORE GENERALLY WILL BE FURNISHED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS. FURNISH NAMEPLATES INDICATING MANUFACTURER, HORSEPOWER, PHASE, CYCLE, VOLTAGE, RPM , TYPE OF MOTOR WINDINGS, NEMA DESIGN AND TYPE OF ENCLOSURE.</div> <div>2.2 SIZE: ADEQUATE FOR THE DUTY TO BE PERFORMED WITHOUT EXCEEDING THEIR FULL RATED LOAD OR SAFE OPERATING TEMPERATURE WHEN THE DRIVEN EQUIPMENT IS OPERATING AT SPECIFIED CAPACITIES WITH AMBIENT TEMPERATURES AND ALTITUDE COMPENSATION SIMULATING ACTUAL JOB CONDITIONS.</div> <div>2.3 TYPE: SUITABLE FOR THE APPLICATION BUT NOT LESS THAN CLASS A INSULATION AND CONTINUOUS DUTY CLASSIFICATION, BASED ON 40 DEGREES C. AMBIENT TEMPERATURE WITH DRIP PROOF FRAMES AND TOTALLY ENCLOSED FOR EXTERIOR USE. CONFORM TO DESIGN, CONSTRUCTION AND PERFORMANCE REQUIREMENTS OF NEMA AND THE ROTATING ELECTRICAL MACHINERY STANDARDS OF ANSI.</div> <div>2.4 VOLTAGE RATING: NEMA STANDARD TO CORRESPOND TO CIRCUIT VOLTAGE SERVING THE MOTOR. MOTORS OPERATING ON 208 VOLT SYSTEMS SHALL BE RATED 200 VOLTS OR SHALL BE SPECIFICALLY WOUND FOR THE VOLTAGE. RATED AND COVERED BY THE PLUS OR MINUS 10% RATED VOLTAGE WARRANTY FOR 208 VOLTS.</div> <div>PART 3 EXECUTION</div> <div>3.1 INSTALLATION: IN ACCORDANCE WITH RELATED WORK SPECIFIED IN OTHER SECTIONS OF THESE SPECIFICATIONS AND STANDARD INDUSTRY PRACTICE.</div> <div>END OF SECTION 26 1500</div> <div>SECTION 26 1550 - MOTOR STARTERS PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B . GENERAL PROVISIONS: SECTION 26 0100.</div> <div>C. GROUNDING: SECTION 26 4500.</div> <div>1.2 SUBMITTALS: SUBMIT COMPLETE SHOP DRAWINGS, CONTROL DIAGRAMS AND DESCRIPTIVE LITERATURE. PART 2 PRODUCTS</div> <div>2.1 GENERAL: STARTERS SHALL BE AS SPECIFIED IN THIS SECTION UNLESS MODIFIED BY OTHER SECTIONS OF THESE SPECIFICATIONS OR BY DETAILS OR CONTROL DIAGRAMS ON THE DRAWINGS. PROVIDE NEMA TYPE I GENERAL PURPOSE ENCLOSURES, UNLESS OTHERWISE NOTED OR REQUIRED, WITH DOORS ARRANGED FOR PADLOCKING. EQUIPMENT STARTERS WITH CONTACTORS TO BREAK EACH UNGROUNDED LINE TO THE MOTOR. STARTERS SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, ITE , SQUARE D, OR CUTLER -HAMMER.</div> <div>2.2 RATING: EACH STARTER SHALL HAVE A HORSEPOWER RATING NOT LESS THAN THE RATING OF THE MOTOR IT CONTROLS. STARTERS AND ALL THEIR RELATED COMPONENT PARTS SHALL BE DESIGNED AND PROPERLY COORDINATED FOR THE RATING AND CHARACTERISTICS OF THE MOTORS FURNISHED UNDER THE VARIOUS SECTIONS OF THE SPECIFICATIONS. MOTOR STARTERS AND OVERCURRENT DEVICES SHALL BE AMBIENT TEMPERATURE COMPENSATED.</div> <div>2.3 OVERLOADS: PROVIDE AMBIENT TEMPERATURE COMPENSATED THERMAL OVERCURRENT DEVICES IN EACH UNGROUNDED PHASE. PROVIDE A SUITABLE RESET FOR SETTING OVER CURRENT TRIP ON THE STARTER FRONT. OVERCURRENT DEVICE RATINGS SHALL NOT EXCEED CODE MAXIMUMS AND SHALL BE AS RECOMMENDED BY THE MOTOR MANUFACTURER FOR THE APPLICATION.</div> <div>2.4 CONTROLS</div> <div>A. CONTROL CIRCUIT CONDUCTORS SHALL BE GROUNDED IN ACCORDANCE WITH THE NEC AND SHALL BE ARRANGED SO THAT AN ACCIDENTAL GROUND WILL NOT START THE MOTOR .</div> <div>B. ENERGY FOR CONTROL CIRCUITS AND INDICATING LIGHTS SHALL BE 120 VOLTS.</div> <div>C. PROVIDE MANUAL START -STOP PUSHBUTTONS MOUNTED IN STARTER CASE UNLESS AUTOMATIC</div> <div>DEVICES ARE SHOWN ELSEWHERE ON</div> <div>DRAWINGS OR SPECIFIED</div> <div>D. AUTOMATIC CONTROL DEVICES SUCH AS THERMOSTATS, FLOAT OR PRESSURE SWITCHES MAY CONTROL THE STARTING AND STOPPING OF MOTORS DIRECTLY, PROVIDED THE DEVICES USED ARE DESIGNED FOR THE PURPOSE AND HAVE AN ADEQUATE HORSEPOWER RATING. WHEN THE AUTOMATIC CONTROL DEVICE DOES NOT HAVE SUCH A RATING, A MAGNETIC STARTER SHALL BE USED, WITH THE AUTOMATIC CONTROL DEVICE ACTUATING THE PILOT CONTROL CIRCUIT.</div> <div>E. STARTERS CONTROLLED BY AUTOMATIC DEVICES SHALL BE PROVIDED WITH HAND -OFF-AUTOMATIC SELECTOR SWITCH MOUNTED ON STARTER CASE AND CONNECTED SO MOTOR CAN BE MANUALLY OPERATED REGARDLESS OF THE POSITION OF THE AUTOMATIC CONTROL DEVICE. SELECTOR SWITCH SHALL NOT BE CONNECTED TO SUPERSEDE ANY SAFETY DEVICE OR SAFETY INTERLOCK.</div> <div>F. PROVIDE STARTERS WITH A SUFFICIENT NUMBER OF AUXILIARY CONTACT (N.O. AND/OR N.C.) TO AFFORD THE CONTROL AND INTERLOCKING REQUIRED. PROVIDE ADDITIONAL RELAYS IF REQUIRED TO OBTAIN THE CORRECT CONTROL.</div> <div>PART 3 EXECUTION</div> <div>3.1 GENERAL: PROVIDE EACH MOTOR WITH A MOTOR STARTER OF PROPER DESIGN TO MEET THE REQUIREMENTS OF THE MOTOR AND DRIVE.</div> <div>3.2 INSTALLATION: INSTALL AND CONNECT IN ACCORDANCE WITH RELATED WORK SPECIFIED IN OTHER SECTIONS OF THESE SPECIFICATIONS AND STANDARD INDUSTRY PRACTICE. END OF SECTION 26 1550</div> <div>SECTION 26 1600 - PANELBOARDS PART 1 - GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B . GENERAL PROVISIONS: SECTION 260100</div> <div>C. GROUNDING: SECTION 264500.</div> <div>1.2 SUBMITTALS: SUBMIT COMPLETE SHOP DRAWINGS WITH OUTLINE DIMENSIONS, DESCRIPTIVE LITERATURE AND COMPLETE DESCRIPTION OF THE FRAME SIZE, TRIP SETTING, CLASS AND INTERRUPTING RATING OF ALL OVERCURRENT DEVICES. IDENTIFY AVAILABLE SPACE.</div> <div>PART 2 - PRODUCTS</div> <div>2.1 GENERAL: DEAD FRONT, SAFETY TYPE WITH VOLTAGE RATINGS AS SCHEDULED. PANELBOARDS SHALL BE OF THE TYPE REQUIRED FOR THE SHORT CIRCUIT AND DUTY RATINGS INDICATED ON THE DRAWINGS. PANELBOARDS SHALL BE AS MANUFACTURED BY ITE, SQUARE D, OR CUTLER-HAMMER AND SHALL BE CIRCUIT BREAKER OR FUSIBLE TYPE AS SCHEDULED.</div> <div>2.2 CABINETS: EACH PANELBOARD SHALL BE ENCLOSED IN A SINGLE SHEET METAL CABINET WITH FRONT DOORS, CATCHES, LOCKS, ETC., AS SPECIFIED IN SECTION 261330, CABINETS.</div> <div>2.3 DOOR-IN-DOOR: BOTH SURFACE AND FLUSH PANELS SHALL BE DOOR-IN-DOOR. THE DOOR OVER THE INTERIOR OF THE PANEL SHALL BE PROVIDED WITH CONTINUOUS PIANO-HINGE TYPE AND COMBINED LOCK AND LATCH. THE OUTSIDE DOOR OVER THE PANEL GUTTERS SHALL HAVE A CONTINUOUS PIANO-HINGE TYPE SYSTEM ON ONE SIDE AND MACHINE SCREWS INTO THREADED HOLES IN THE PANELBOARD CABINET ON THE OTHER THREE SIDES. IN ORDER TO INSURE THE RIGIDITY OF THE OUTSIDE DOOR, SURFACE TYPE PANELS SHALL HAVE A 1/2" DEEP LIP BENT OVER ALL AROUND WITH THE CORNERS WELDED AND GROUND; OR, IN THE CASE OF FLUSH PANELS A STEEL ANGLE FRAME, EQUIVALENT IN STRENGTH TO THE BENT OVER LIP SHALL BE WELDED TO THE INSIDE OF THE DOOR. THE OUTSIDE DOOR SHALL BE OF SUCH SIZE AS TO ALLOW A MINIMUM OF 2-3/4" OPENING TO ALL FOUR SIDES OF THE WIRING GUTTER OR AS REQUIRED BY NEC. ALL LOCKS SHALL BE KEYPED ALIKE.</div> <div>2.4 BREAKERS: MOLDED-CASE OR COMBINATION MOLDED-CASE AND CURRENT LIMITED FUSES AS SCHEDULED OR REQUIRED. PROVIDE QUICK MAKE AND QUICK BREAK TOGGLE MECHANISM, INVERSE TIME TRIP CHARACTERISTICS AND TRIP FREE OPERATION ON OVERLOAD OR SHORT CIRCUIT. AUTOMATIC TRIPPING SHALL BE INDICATED BY A HANDLE POSITION BETWEEN THE MANUAL OFF AND ON POSITION. PROVIDE A TRIP ELEMENT FOR EACH POLE, A COMMON TRIP BAR FOR ALL POLES AND A SINGLE MOLDED INSULATING MATERIAL HANDLE. HANDLE TIES WILL NOT BE ACCEPTED. ADJUSTABLE MAGNETIC TRIP DEVICES SHALL BE SET AT THE FACTORY TO THE LOW TRIP SETTING. PROVIDE BREAKER FRAME SIZES AS REQUIRED FOR THE CONTINUOUS RATING OR THE INTERRUPTING CAPACITY, WHICHEVER IS LARGER .</div> <div>2.5 BOLTED TYPE: CIRCUIT BREAKER CURRENT -CARRYING CONNECTIONS TO THE BUS SHALL BE OF THE BOLTED TYPE, FACTORY ASSEMBLED. STAB IN TYPE NOT PERMITTED. PROVIDE BUS BARS FOR THREE PHASE PANELBOARDS OF THE SEQUENCE PHASED TYPE CONNECTION AND ARRANGED FOR THREE -PHASE, FOUR WIRE MAINS, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.</div> <div>2.6 FUSIBLE SWITCH UNITS: QUICK MAKE, QUICK BREAK TYPE WITH EXTERNAL OPERATION HANDLE SUITABLE FOR PADLOCKING IN OFF POSITION. PROVIDE INTERLOCK TO PREVENT OPENING COVER WHEN SWITCH IS IN ON POSITION UNLESS INTERLOCK RELEASE IS OPERATED. PROVIDE SWITCH FRAME SIZES AS REQUIRED FOR THE CONTINUOUS RATING OR THE INTERRUPTING CAPACITY, WHICHEVER IS LARGER. FUSIBLE PANELBOARDS SHALL BE UL RATED AND LISTED FOR SERVICE ENTRANCE WHERE APPLICABLE.</div> <div>2.7 SPACE ONLY: WHERE "SPACE ONLY" IS NOTED ON THE DRAWINGS, PROVIDE NECESSARY CONNECTORS, MOUNTING BRACKETS, ETC., FOR THE FUTURE INSERTION OF AN OVERCURRENT DEVICE.</div> <div>2.8 DIRECTORIES: PROVIDE CIRCUIT DIRECTORIES ON THE INSIDE FACE OF THE DOOR OF EACH PANEL.</div> <div>2.9 LABELS: LABELS FOR IDENTIFYING THE BREAKERS SHALL BE ENGRAVED LAMINATED PLASTIC STRIPS ATTACHED BY SCREWS OR PHENOLIC BUTTONS OR SMALL WINDOW FRAME TYPE. ADHESIVE STICK ON LABELS ALONE WILL NOT BE ACCEPTABLE UNLESS SPECIFICALLY APPROVED.</div> <div>2.10 SKIRTS: WHERE NOTED ON THE DRAWINGS PANELBOARDS SHALL BE SKIRTED WITH COMPLETE METAL ENCLOSURES AND BARRIERS SEPARATING THE PANEL INTERIOR .</div> <div>PART 3 - EXECUTION</div> <div>3.1 DIRECTORIES: PROVIDE TYPEWRITTEN CIRCUIT DESCRIPTIONS REFERENCING PERMANENT ROOM NUMBERING ASSIGNED IN LIEU OF THE ROOM NUMBERING SHOWN ON THE DRAWINGS INSERTED IN PLASTIC HOLDER . TEXT SHALL BE ABLE TO BE READ ENTIRELY WITHOUT MOVING THE CARD.</div> <div>3.2 CIRCUIT NUMBERING: CIRCUIT NUMBERING SHOWN ON THE DRAWINGS IS BASED ON POLE POSITION IN THE PANELBOARD AND NOT CONSECUTIVE NUMBERING.</div> <div>3.3 PHASE ROTATION: PHASE A , LEFT BUS; PHASE B, CENTER BUS; PHASE C, RIGHT BUS (FRONT VIEWING). END OF SECTION 26 1600</div> <div>SECTION 26 1700 - MOTOR AND CIRCUIT DISCONNECTS PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B . GENERAL PROVISIONS:</div>	<div><p>16 Feb 2017</p></div> <div>R<sup>2</sup> ARCHITECTURAL DESIGN 730 SAN MATEO BLVD SE, SUITE 1 ALBUQUERQUE, NEW MEXICO 87108 TEL: 505.792.6224 FAX: 888.892.5814</div> <div>JH SA DRAWN BY: CHECKED BY: DATE: SCALE:</div> <div>SANTA FE MOUNTAIN CENTER 1160 PARKWAY DRIVE SUITES A &amp; B SANTA FE, NM ELECTRICAL SPECIFICATIONS</div>	<div>-SHEET-</div> <div>E003</div>

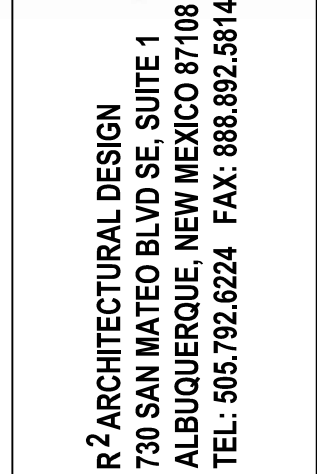


<div> <div>SECTION 2601.00.</div> <div>C. GROUNDING: SECTION 264500. PART 2 PRODUCTS</div> </div> <div>2.1 DISCONNECTING MEANS</div> <div> <div>A. SAFETY SWITCHES: FUSIBLE OR NON-FUSIBLE TYPE HD QUICK BREAK SAFETY SWITCHES OF THE SIZES AND CAPACITIES INDICATED OR REQUIRED. RAIN-TIGHT ENCLOSURES AT LOCATIONS EXPOSED TO THE WEATHER .</div> <div>B. SEPARATELY ENCLOSED MOTOR SNAP SWITCHES: MOTOR SNAP SWITCHES MAY BE USED FOR MOTOR DISCONNECT MEANS, CONTROLLER AND MOTOR OVERCURRENT PROTECTION WHEN APPLICABLE. THESE DEVICES SHALL BE HORSEPOWER RATED AND MAY CONTAIN MOTOR RUNNING OVERCURRENT PROTECTION.</div> <div>C. SAFETY TYPE DISCONNECTING SWITCHES: HEAVY DUTY, QUICK MAKE, QUICK BREAK TYPE, 250 OR 600 VOLT RATING AS REQUIRED FOR THE APPLICATION, NUMBER OF POLES AND AMPACITY AS NOTED OR REQUIRED BY CODE, FUSIBLE WHERE NOTED WITH FUSE CLIPS, SUITABLE FOR BUSS FUSETRON CLASS R FUSES, SHORT CIRCUIT RATING OF 200,000 RMS AMPERES WITH CV CLASS R REJECTION FEATURE INSTALLED IN FUSEHOLDERS, NEMA 1 ENCLOSURES FOR DRY LOCATIONS, NEMA 3 R ENCLOSURES FOR WET LOCATIONS OR AT EXPOSED WEATHER LOCATIONS UNLESS OTHERWISE NOTED.</div> </div> <div>2.2 MANUFACTURERS</div> <div> <div>A. GENERAL ELECTRIC, ITE , SQUARE D, OR CUTLER-HAMMER, PART 3 EXECUTION</div> <div>DISCONNECT MEANS: INSTALL IN EACH LOCATION INDICATED ON THE DRAWINGS AND ELSEWHERE AS REQUIRED BY NEC. END OF SECTION 26</div> </div> <div>1700</div> <div>SECTION 26 1810 - FUSES PART 1 GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B . GENERAL PROVISIONS:</div> <div>SECTION 26 0100.</div> <div>C. MOTOR AND CIRCUIT DISCONNECT: SECTION 26 1700. D. GROUNDING: SECTION 26 4500.</div> </div> <div>PART 2 PRODUCTS:</div> <div>2.1 FUSES</div> <div> <div>A. GENERAL: DUAL ELEMENT, TIME DELAY TYPE, BASED ON HEAVY SERVICE, BUSS FUSETRON, OR EQUAL, UNLESS OTHERWISE NOTED OR REQUIRED FOR INSTALLATION.</div> <div>B. CURRENT LIMITING FUSES: PROVIDE WHERE INDICATED ON THE DRAWINGS, FOR INDIVIDUAL MOTOR CIRCUIT PROTECTION, PROVIDE FUSE SIZED APPROXIMATELY 125 PERCENT OF FULL LOAD CURRENT WITH 100,000 AMPERES INTERRUPTING CAPACITY, FOR NON-MOTOR FEEDER PROTECTION IN CONJUNCTION WITH FUSED SWITCHES, INSTALL NEMA CLASS I FUSES SIZED 125 PERCENT OF LOAD CURRENT OR AS REQUIRED FOR COORDINATION WITH AIR AND MOLDED CASE CIRCUIT BREAKERS, SHALL BE FURNISHED BY THE CIRCUIT BREAKER MANUFACTURER .</div> <div>C. ABOVE 600 AMPS, CLASS L, "HI-CAP" AS MANUFACTURED BY BUSSMAN OR APPROVED</div> </div> <div>EQUIVALENT BY</div> <div> <div>CHASE-SHAMMUT OR FEDERAL PACIFIC.</div> <div>D. BELOW 600 AMPS, AS REQUIRED BY SHORT CIRCUIT DUTY, CLASS K-1, "LIMITRON" OR CLASS K-5, "LOW PEAK" OR CLASS K-5, "FUSETRON" AS MANUFACTURED BY BUSSMAN OR APPROVED EQUIVALENT BY CHASE-SHAMMUT OR FEDERAL PACIFIC.</div> <div>E. ALL SWITCHES HAVING CURRENT LIMITING FUSES INSTALLED SHALL HAVE A LAMICOID NAMEPLATE WITH WHITE LETTERING ON RED BACKGROUND READING:</div> <div>WARNING, REPLACE ONLY WITH CURRENT LIMITING FUSES AS ORIGINALLY INSTALLED</div> </div> <div>2.2 COORDINATION: COORDINATE THE LOW VOLTAGE FUSES REQUIRED FOR THE PROJECT TO PROVIDE BASIC SELECTIVE PROTECTION AND PROPERLY COORDINATE WITH THE OTHER ASSOCIATED PROTECTIVE EQUIPMENT.</div> <div>PART 3 EXECUTION</div> <div> <div>3.1 COORDINATION: COORDINATE THE LOW VOLTAGE FUSES REQUIRED FOR THE PROJECT TO PROVIDE BASIC SELECTION PROTECTION AND PROPERLY COORDINATE WITH THE OTHER ASSOCIATED PROTECTIVE EQUIPMENT.</div> <div>3.2 SPARE FUSES: FURNISH ONE COMPLETE SPARE SET OF EACH SIZE OF FUSES. DELIVER TO THE OWNER IN THE ORIGINAL BOXES. IT SHALL CONSIST OF 100% FUSE REPLACEMENT FOR ALL FUSES REQUIRED FOR PANELBOARDS AND SAFETY SWITCHES.</div> </div> <div>END OF SECTION 26 1810</div> <div>SECTION 26 4500 - GROUNDING</div> <div>PART 1 - GENERAL</div> <div>1.1 RELATED WORK SPECIFIED ELSEWHERE</div> <div> <div>A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS (IF ANY) AND GENERAL REQUIREMENTS APPLY TO THE WORK SPECIFIED IN THIS SECTION. B . GENERAL PROVISIONS:</div> <div>SECTION 26 0100.</div> <div>C. RACEWAYS: SECTION 26 1100.</div> </div> <div>PART 2 - PRODUCTS</div> <div>2.1 MATERIALS, EQUIPMENT AND DEVICES RELATED TO THE GROUNDING SYSTEM ARE SPECIFIED UNDER OTHER SECTIONS OF THESE SPECIFICATIONS.</div> <div>PART 3 - EXECUTION</div> <div> <div>3.1 GENERAL: INSTALL TWO SEPARATE GROUNDING SYSTEMS, A SERVICE GROUNDING SYSTEM AND AN EQUIPMENT GROUNDING SYSTEM, THE SERVICE EQUIPMENT, CONDUIT SYSTEMS, SUPPORTS, CABINETS, EQUIPMENT, AND NEUTRAL CONDUCTOR SHALL BE GROUNDED IN ACCORDANCE WITH THE MINIMUM CODE REQUIREMENTS AND AS FURTHER INDICATED ON THE DRAWINGS OR AS SPECIFIED. CONNECT THE TWO GROUNDING SYSTEMS TOGETHER ONLY AT THE MAIN SERVICE EQUIPMENT AND AT THE SECONDARY TERMINALS OF TRANSFORMERS CREATING SEPARATELY DERIVED DISTRIBUTION SYSTEMS SUCH AS DRY -TYPE TRANSFORMERS.</div> <div>3.2 SERVICE GROUNDING SYSTEM</div> <div> <div>A. GENERAL: THE SERVICE GROUNDING SYSTEM IS PROVIDED FOR THE AC SERVICE NEUTRAL GROUND. CURRENT RETURN CONDUCTORS, SUCH AS NEUTRALS OF THE SERVICE ENTRANCE, FEEDER CIRCUITS AND BRANCH CIRCUITS, SHALL NOT BE USED FOR EQUIPMENT GROUNDING. CARE MUST BE EXERCISED TO INSURE THAT NEUTRAL BARS ARE NOT BONDED TO THE ENCLOSURES OF PANELBOARDS, ETC., WHICH ARE NOT PART OF THE MAIN SERVICE EQUIPMENT. EXCEPT FOR SEPARATELY DERIVED SYSTEMS, THE NEUTRAL CONDUCTORS SHALL BE GROUNDED ONLY IN THE MAIN SERVICE EQUIPMENT.</div> <div>B. COMMON GROUND POINT: ESTABLISH ONE COMMON GROUND POINT IN THE MAIN SERVICE EQUIPMENT BY INTERCONNECTING THE INSULATED NEUTRAL BUS (OR BAR) , THE UNINSULATED EQUIPMENT GROUND BUS (OR BAR) , AND SERVICE GROUNDING ELECTRODE CONDUCTOR .</div> <div>C. NEUTRAL DISCONNECTING MEANS: INSTALL A NEUTRAL DISCONNECTING MEANS IN THE MAIN SERVICE EQUIPMENT FOR DISCONNECTING AND ISOLATING THE NEUTRAL BUS FROM THE COMMON GROUND. THE DISCONNECTING MEANS MAY BE DISCONNECTING LINKS IN THE INTERCONNECTION BETWEEN THE INSULATED NEUTRAL AND UNINSULATED EQUIPMENT GROUND.</div> <div>D. NEUTRAL BARS: PROVIDE AN INSULATED NEUTRAL BAR, SEPARATE FROM THE UNINSULATED EQUIPMENT GROUND BAR, IN ALL</div> </div> </div>	<div> <div>PANELBOARDS, STARTERS, DISCONNECT SWITCHES, CABINETS, ETC., WHICH HAVE INTRINSIC CONNECTIONS.</div> <div>3.3 EQUIPMENT GROUNDING SYSTEM</div> <div> <div>A. GENERAL: PROVIDE A COMPLETE EQUIPMENT GROUNDING SYSTEM IN ACCORDANCE WITH THE MINIMUM CODE REQUIREMENTS AND AS FURTHER INDICATED ON THE DRAWINGS OR SPECIFIED. THE EQUIPMENT GROUND (GREEN CONDUCTOR) CONSISTS OF METALLIC CONNECTIONS TO GROUND OF NON-CURRENT -CARRYING AND IS PART OF THE WIRING SYSTEM OR APPARATUS CONNECTED TO THE SYSTEM . THE PRIMARY PURPOSE OF EQUIPMENT GROUNDING IS TO PROVIDE GREATER SAFETY BY LIMITING THE ELECTRICAL POTENTIAL BETWEEN NON-CURRENT-CARRYING PARTS OF THE SYSTEM AND TO PROVIDE A LOW IMPEDANCE PATH TO GROUND FOR POSSIBLE GROUND FAULT CURRENTS.</div> <div>B. COMMON GROUND POINT: ESTABLISH ONE COMMON GROUND POINT AS SPECIFIED ELSEWHERE IN THIS SECTION OF THE SPECIFICATIONS FOR INTERCONNECTION OF THE EQUIPMENT GROUNDING SYSTEM AND THE SERVICE GROUNDING ELECTRODE CONDUCTOR .</div> <div>C. SERVICE EQUIPMENT ENCLOSURE: BOND THE ENCLOSURE OF THE MAIN SERVICE EQUIPMENT TO THE UNINSULATED EQUIPMENT GROUND BOX (OR BAR) WITH A CONDUCTOR OR BAR SIZED FOR 5 . 0% OF THE LARGEST SERVICE OVERCURRENT DEVICE.</div> <div>D. GROUND BAR: PROVIDE AN UNINSULATED EQUIPMENT GROUND BAR, SEPARATE FROM ANY INSULATED NEUTRAL BAR, IN ALL PANELBOARDS, STARTERS, DISCONNECT SWITCHES, CABINETS, ETC. FOR GROUNDING THE ENCLOSURE AND FOR CONNECTING OTHER EQUIPMENT GROUND CONDUCTORS. THE GROUND BAR SHALL BE AN INTEGRALLY MOUNTED AND BRACED BUS BAR IN PANELBOARDS OR A SEPARATELY MOUNTED BAR ADEQUATELY BRACED OR BOLTED TO THE ENCLOSURE AFTER THOROUGHLY CLEANING BOTH SURFACES TO ASSURE GOOD CONTACT. PROVIDE: SOLDERLESS PRESSURE CONNECTORS FOR ALL CONDUCTOR TERMINATIONS, NUMBER AND SIZE OF PRESSURE CONNECTORS ON EQUIPMENT GROUNDING BARS AS REQUIRED FOR THE TERMINATION OF EQUIPMENT GROUNDING CONDUCTORS. IN ADDITION TO THE ACTIVE CIRCUITS, PROVIDE PRESSURE CONNECTORS FOR ALL THREE-PHASE SPARES AND SPACES.</div> <div>E. CONDUITS: WHERE METALLIC CONDUITS TERMINATE WITHOUT MECHANICAL CONNECTION TO A METALLIC HOUSING OF ELECTRICAL EQUIPMENT BY MEANS OF LOCK NUT AND BUSHINGS, PROVIDE GROUND BUSHING CONNECTED WITH A BARE COPPER CONDUCTOR TO THE GROUND BAR IN THE ELECTRICAL EQUIPMENT. METALLIC CONDUITS CONTAINING GROUND WIRING ONLY SHALL BE BONDED TO THE GROUND WIRE AT BOTH CONDUIT ENTRANCE AND EXIT . INSTALL GROUNDING CONDUCTOR IN EACH NONMETALLIC CONDUIT OR DUCT EXCEPT THOSE USED FOR TELEPHONE, SOUND, OR LOW VOLTAGE SIGNALS AND IN ALL FLEXIBLE CONDUIT THAT DOES NOT HAVE A BUILT -IN GROUND CONDUCTOR . BOND THE CONDUCTOR AT BOTH ENDS TO THE EQUIPMENT GROUNDING SYSTEM .</div> <div>F. FEEDERS AND BRANCH CIRCUITS: PROVIDE A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR EACH SINGLE OR THREE PHASE FEEDER. PROTECT EACH BRANCH CIRCUIT WITH A THREE PHASE PROTECTIVE DEVICE. PROVIDE A SEPARATE GREEN-INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR SINGLE PHASE BRANCH CIRCUITS WHERE INDICATED ON THE DRAWINGS. INSTALL THE REQUIRED GROUNDING CONDUIT IN THE COMMON CONDUIT OR RACEWAY WITH THE RELATED PHASE AND/OR NEUTRAL CONDUCTORS AND CONNECT TO THE BOX OR CABINET GROUNDING TERMINAL. WHERE THERE ARE PARALLEL FEEDERS INSTALLED IN MORE THAN ONE RACEWAY EACH RACEWAY SHALL HAVE A GREEN INSULATED EQUIPMENT GROUND CONDUCTOR INSTALLED.</div> <div>G. DEVICES: INSTALL A MINIMUM NO. 12 GREEN INSULATED EQUIPMENT BONDING CONDUCTOR FROM A GROUNDING TERMINAL IN THE RESPECTIVE OUTLET OR JUNCTION BOX TO THE GREEN GROUND TERMINAL OF ALL RECEPTACLES AND THROUGH FLEXIBLE CONDUIT TO ALL LIGHT FIXTURE HOUSINGS AND OTHER FIXED EQUIPMENT.</div> <div>H. MOTORS: INSTALL A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR FROM THE EQUIPMENT GROUND BAR IN THE MOTOR CONTROL CENTER OR SEPARATE STARTER THROUGH THE CONDUIT AND FLEXIBLE CONDUIT TO THE GROUND TERMINAL IN THE CONNECTION BOX MOUNTED ON THE MOTOR. INSTALL THE GROUNDING CONDUCTOR IN THE COMMON CONDUIT OR RACEWAY WITH THE RELATED MOTOR CIRCUIT CONDUCTORS.</div> </div> <div>3.4 SEPARATELY DERIVED SYSTEMS: TRANSFORMERS CREATING SEPARATELY DERIVED DISTRIBUTION SYSTEMS, SUCH AS DRY TYPE TRANSFORMERS, SHALL UTILIZE THE EQUIPMENT GROUND BARS IN THE TRANSFORMER ENCLOSURE FOR BOTH SECONDARY EQUIPMENT GROUND AND SECONDARY NEUTRAL GROUND WITH SEPARATE GROUNDING CONDUCTOR EXTENDED TO AN APPROVED GROUND ELECTRODE.</div> <div>3.5 GROUNDING ELECTRODES: TWO SERVICE GROUND ELECTRODES SHALL BE UTILIZED. ONE SHALL BE THE MAIN COLD WATER METALLIC WATER PIPING SYSTEM AND THE OTHER SHALL BE A MADE ELECTRODE CONSISTING OF NOT LESS THAN TWENTY FEET OF BARE COPPER CONDUCTOR ENCASED ALONG THE BOTTOM OF A CONCRETE FOUNDATION FOOTING WHICH IS IN DIRECT CONTACT WITH THE EARTH (NEO 250-H). MAKE THE CONNECTIONS TO THE COLD WATER PIPE INSIDE THE BUILDING AT THE POINT OF ENTRANCE. THE GROUNDING ELECTRODE FOR SEPARATELY DERIVED SYSTEMS SHALL BE APPROVED FOR THE APPLICATION.</div> <div>3.6 GROUNDING CONDUCTORS: THE GROUNDING CONDUCTORS FOR BOTH SERVICE GROUND ELECTRODES SHALL BE INSULATED OR BARE COPPER, SIZED IN ACCORDANCE WITH NEC 250-94, INCLUDING THE CONDUCTOR FOR THE MADE ELECTRODE. THE CONDUCTORS SHALL BE CONTINUOUS WITHOUT JOINT OR SPICE AND SHALL BE INSTALLED IN THE CONDUIT BONDED TO THE CONDUCTOR AT EACH END. INSTALL THE CONDUCTOR TO PERMIT THE SHORTEST AND THE MOST DIRECT PATH AND TERMINATE IN THE MAIN SERVICE EQUIPMENT ON THE COMMON GROUND POINT. EQUIPMENT GROUNDING CONDUCTORS SHALL BE GREEN INSULATED CONDUCTORS EQUIVALENT TO THE INSULATION ON THE ASSOCIATED PHASE CONDUCTOR, BUT NOT LESS THAN TYPE TW. THE EQUIPMENT GROUNDING CONDUCTOR OR STRAPS SHALL BE SIZED IN ACCORDANCE WITH NEC, WHERE ONE FEEDER SERVES A SERIES OF PANELBOARDS OF TRANSFORMERS THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPICES. GROUNDING CONDUCTORS SHALL NOT BE INSTALLED THROUGH METAL SHEATHED HOLES. ALL CONNECTIONS SHALL BE AVAILABLE FOR INSPECTION AND MAINTENANCE.</div> <div>3.7 GROUND CONNECTIONS: CLEAN SURFACES THOROUGHLY BEFORE APPLYING GROUND LUGS OR CLAMPS. IF SURFACE IS COATED THE COATING MUST BE REMOVED DOWN TO THE BARE METAL. AFTER THE COATING HAS BEEN REMOVED APPLY A NON-CORROSIVE APPROVED COMPOUND TO CLEANED SURFACE AND INSTALL LUGS OR CLAMPS. WHERE GALVANIZING IS REMOVED FROM METAL IT SHALL BE PAINTED OR TOUCHED UP WITH "GALVANOID", OR EQUAL.</div> <div>3.8 TESTS</div> <div> <div>1. REMOVE ALL JUMPERS BETWEEN THE EQUIPMENT GROUND BUSES AND THE SERVICE (NEUTRAL) GROUND BUSES IN THE MAIN SERVICE PANEL AND ALL SEPARATELY DERIVED SYSTEMS. SEE SECTION 3.02.C.</div> <div>2. FOR EACH GROUNDING SYSTEM , USING A MEGGER , MEASURE THE RESISTANCE BETWEEN THE TWO GROUND BUSES AT THE PANEL WHERE THE JUMPER WAS INSTALLED. THE RESISTANCE SHALL BE GREATER THAN 10 MEGOHMS.</div> <div>3. RE-CONNECT THE EQUIPMENT AND SERVICE BUS JUMPERS ON ALL SYSTEMS. SEE SECTION 3.02 .C.</div> <div>4. FOR EACH GROUNDING SYSTEM , USING A MEGGER , MEASURE THE RESISTANCE BETWEEN THE TWO GROUND BUSES AT THE PANEL FARTEST AWAY (ELECTRICALLY) FROM THE PANEL WHERE THE JUMPER WAS INSTALLED. THE RESISTANCE SHALL BE LESS THAN 5 OHMS.</div> <div>5. SUBMIT A WRITTEN REPORT TO THE ENGINEER FOR APPROVAL. THE SERVICE SHALL NOT BE ENERGIZED IF THE TEST SHOWS MORE THAN 5 OHMS, UNLESS APPROVED BY THE ARCHITECT.</div> </div> <div>END OF SECTION 26 4500</div></div>
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1. REFER TO GENERAL NOTES ON E-001.
2. REFER TO REFLECTED CEILING PLAN DRAWINGS FOR LOCATIONS OF CEILING MOUNTED DEVICES.
3. ALL BRANCH CIRCUITS SHALL BE #12 CONDUCTORS AND 3/4" UNLESS OTHERWISE NOTED.
4. PANEL BOARDS, CABINETS, AND ELECTRICAL EQUIPMENT ARE SHOWN ON THE DRAWINGS WITH THE IDENTIFYING TEXT ON THE FRONT SIDE. THE EQUIPMENT FRONT IS TOWARD THE IDENTIFYING TEXT.
5. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR CONTROL DIAGRAMS AND SEQUENCE OF OPERATION DESCRIPTIONS.
6. ALL RECEPTACLES SERVING FOOD SERVICE EQUIPMENT TO BE GFCI PROTECTED.

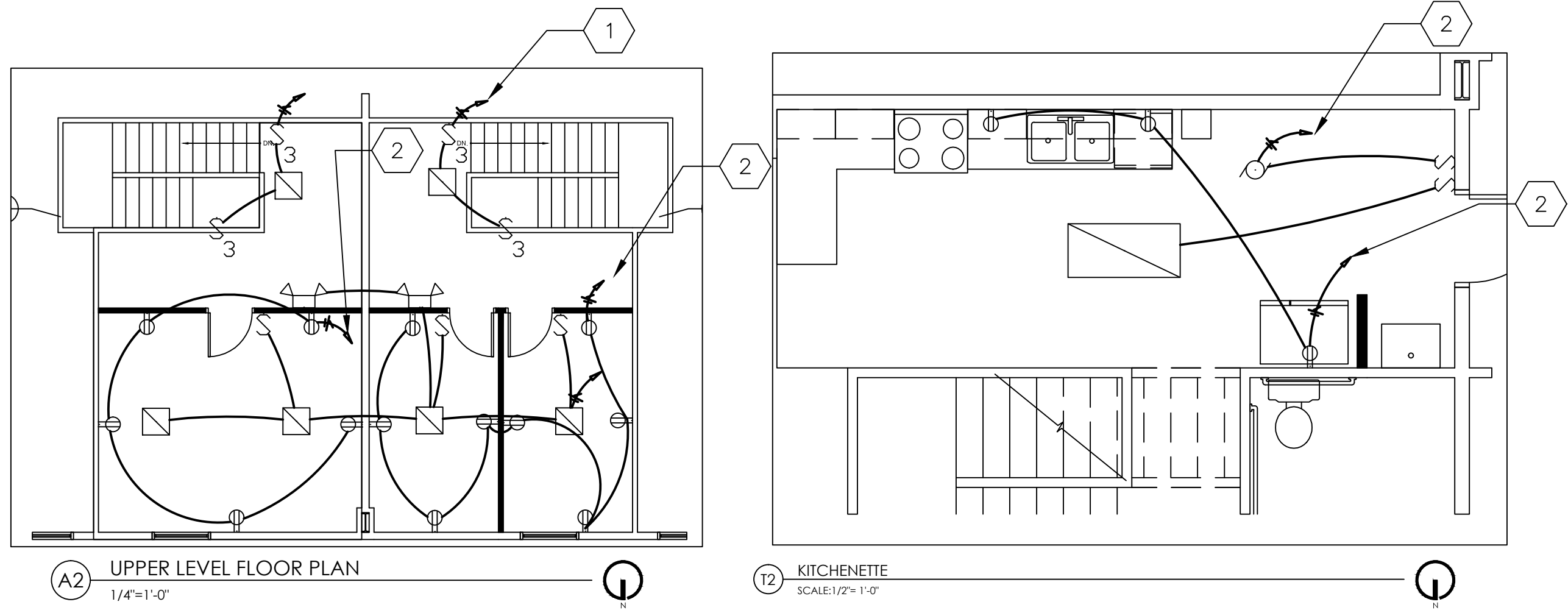
1. REUSE EXISTING LIGHTING CIRCUITS. TYPICAL OF ALL LIGHTING.

2. CONNECT TO SPARE IN EXISTING PANEL P1. (2) #12 AWG AND (1) #12 AWG GROUND WITH 20 AMP CIRCUIT BREAKER.



<p><b>SANTA FE MOUNTAIN CENTER</b>  <b>1160 PARKWAY DRIVE SUITES A &amp; B</b>  <b>SANTA FE, NM</b></p>	<p><b>ELECTRICAL FLOOR PLAN</b></p>
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# E101





LIGHTING CALCULATIONS																															
ROOM										LUMINAIRE 1										LUMINAIRE 2										TOTAL	
NUMBER	NAME	SHAPE	L	W	CLG HT	PERIM	AREA	DESIGN		LAMP		LAMP		LAMP		FIXTURE COUNT		LAMP		LAMP		LAMP		FIXTURE COUNT		FC	KW	W/SF			
								FC	LLF	RCR	DBNO	TYPE	LUM	CU	QUAN	WATT	DESIGN	ACTUAL	DBNO	TYPE	LUM	CU	QUAN	WATT	DESIGN	ACTUAL					
107	KITCHENETTE	RECTANGULAR	23	9	20	64	207	15	0.8	15.5	ES8P 2X4	T8	3100	0.80	2	43	0.6	1			0	0	0	0			24.0	0.09	0.42		
201	OFFICE	RECTANGULAR	15	9	8	48	135	15	0.8	7.1	ES8P 2X2	T8	1400	0.80	2	21	0.9	1			0	0	0	0			16.6	0.04	0.31		
202	OFFICE	RECTANGULAR	15	9	8	48	135	15	0.8	7.1	ES8P 2X2	T8	1400	0.80	2	21	0.9	1			0	0	0	0			16.6	0.04	0.31		
203	OFFICE	RECTANGULAR	15	9	8	48	135	15	0.8	7.1	ES8P 2X2	T8	1400	0.80	2	21	0.9	1			0	0	0	0			16.6	0.04	0.31		
204	OFFICE	RECTANGULAR	15	9	8	48	135	15	0.8	7.1	ES8P 2X2	T8	1400	0.80	2	21	0.9	1			0	0	0	0			16.6	0.04	0.31		
206	HALL	IRREGULAR				8	65	192	10	0.8	6.8	ES8P 2X2	T8	1400	0.80	2	21	0.9	1			0	0	0	0			11.7	0.04	0.22	
207	HALL	IRREGULAR				8	65	192	10	0.8	6.8	ES8P 2X2	T8	1400	0.80	2	21	0.9	1			0	0	0	0			11.7	0.04	0.22	
TOTAL							1131																					0.34	0.30		
										IECC TABLE 505.5.2 BUILDING AREA TYPE: DINING; CAFETERIA/FAST FOOD										MAXIMUM LIGHTING POWER DENSITY:										1	
THIS PROJECT COMPLIES WITH 2009 IECC CHAPTER 5 SECTION 505 "ELECTRICAL POWER AND LIGHTING SYSTEMS" ARTICLE 505.5 "INTERIOR LIGHTING POWER REQUIREMENTS AND NMAC 14.7.6.22 CHAPTER 5 AMENDMENTS.																															

SERVICE SIZING CALCULATIONS - LOAD RECAP

SERVICE CHARACTERISTICS: 208/120V, 3-PHASE, 4-WIRE

EXISTING PANEL "A" 16.7 KVA  
ADDED LOAD PANEL "A" 1 KVA  
TOTAL LOAD PANEL "A" 17.7 KVA (49A)

EXISTING 200A FUSE FEEDING PANEL "A" IS ADEQUATE.

EXISTING PANEL "B" 16.7 KVA  
ADDED LOAD PANEL "B" 1 KVA  
TOTAL LOAD PANEL "B" 17.7 KVA (49A)

EXISTING 200A FUSE FEEDING PANEL "B" IS ADEQUATE.

EXISTING MAIN LOAD 33.4 KVA  
LOAD ADDED 2 KVA  
TOTAL LOAD MAIN 35.4 KVA (99A)

EXISTING 400A SERVICE IS ADEQUATE..

IECC LIGHTING COMPLIANCE

THE LIGHTING DESIGN SHOWN ON THESE PLANS IS IN COMPLIANCE WITH THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) SECTION 505 - ELECTRICAL POWER AND LIGHTING SYSTEMS AS FOLLOWS:

1.

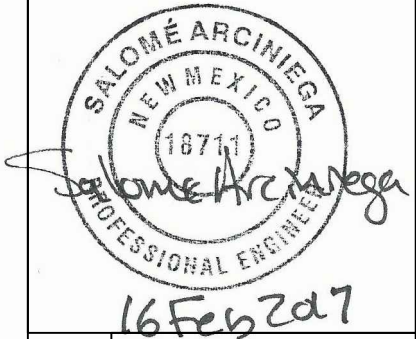
505.2.2.2 - LIGHTING CONTROLS:
- A.

THIS PROJECT DOES NOT INCLUDES AREAS LARGER THAN 5,000 SQUARE FEET.
2.

TABLE 505.5.2 - INTERIOR LIGHTING POWER ALLOWANCES: THIS TABLE LIMITS THE ALLOWABLE LIGHTING POWER DENSITY (LPD) WITHIN AN OFFICE BUILDING TO 1.0 W/SF.
- BUILDING REMODEL AREA IS 1316 SQ FT, TOTAL ALLOWABLE WATTAGE IS 1842W.
- INTERIOR LIGHTING LOAD = 990W. THIS BUILDING HAS A LPD OF 0.75 W/SF AND COMPLIES WITH MAXIMUM ALLOWABLE LPD.
3.

TABLE 505.6.2(2) - INDIVIDUAL LIGHTING POWER ALLOWANCES FOR BUILDING EXTERIORS: THIS TABLE LIMITS EXTERIOR LIGHTING BASED ON ZONE CLASSIFICATION AND LOCATION OF LIGHTING. THIS BUILDING IS CLASSIFIED AS ZONE 2: RESIDENTIAL ZONING. THE EXTERIOR LIGHTING POWER ALLOWANCES ARE:

NO CHANGES TO EXTERIOR.



R<sup>2</sup> ARCHITECTURAL DESIGN  
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DRAWN BY:	JH
CHECKED BY:	SA
DATE:	2/13/17
SCALE:	AS SHOWN

SANTA FE MOUNTAIN CENTER  
1160 PARKWAY DRIVE SUITES A & B  
SANTA FE, NM

ELECTRICAL DIAGRAMS

-SHEET-  
E601